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The result of a plan evolved in order to assess the educational potentials of Memphis with a view toward their exploitation to the fullest to meet the manpower demands of the industrial and commercial community today. An analysis was made of present and projected job vacancies and the character of these positions was determined with respect to levels of education or training. A one day seminar culminated the plan and this document contains the proceedings of that seminar. (NI) CH

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EDUCATIONAL ASSESSMENT— MEMPHIS

Education Committee
Memphis Area Chamber of Commerce

Central Midwestern Regional Educational Laboratory, Inc.
Memphis, Tennessee, 1967

EF 002829

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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FOREWORD

The Memphis City School system has been recognized for its excellence among city school systems in cities of comparable size. The Medical Units of the University of Tennessee, located in Memphis, have been recognized as the institution supplying the greatest number of medical degrees in the United States. Other community schools, public, private and parochial, contribute immensely to the reputation of the city and to the county as a community richly endowed with educational institutions. Most of the residents of the area are well aware of these colleges, universities, technical schools and day schools but until the Education Committee of the Chamber of Commerce provided for a survey of these institutions, it appeared that no one had ever considered compiling an assessment of these facilities.

A census of labor revealed that the level of unemployment in the Memphis area was lower than the national level. For the laborer this meant a great opportunity for job placement but for the industrial community it could be an alarming situation leading to shortages in manpower needs. Action was essential before a crisis was at hand.

The situation demanded attention. Are the educational potentials of the community exploited to the fullest extent possible to meet the many demands of the industrial and commercial community today?

A plan evolved: Assemble the members of the Chamber, for these are the industrial and commercial leaders of the community, and assess education for Memphis. Compile the data and report in a concise manner for all educational facilities within the community. Analyze the job vacancies that exist or that are anticipated to exist within the immediate future; determine the character of these positions with respect to levels of education or training.

Utilize the expertise within the community to report the intracacies of available resources for education and plans for the future. Encourage a confrontation between the labor consumer and the labor supplier. Assess the potential and shape the future.

This publication is a report of the plan which evolved. The culmination of the plan was a one-day seminar held at the Sheraton-Peabody Hotel in Memphis on November 17, 1966. The report is in the form of a "proceedings" for the day's activities. The plan is not complete; it can never end for each newday brings a new problem and a new solution. This is life in a viable community.

OPENING REMARKS

William Pollard

Good morning, My name is William Pollard and I am Chairman of the Education Committee of the Memphis Area Chamber of Commerce.

On behalf of the Chamber, we wish to thank each of you for your interest and presence today for this seminar, "Educational Assessment–Memphis." Primary to any program for attaining a better Memphis is the matter of education–adequate education that will properly train our young people sufficiently so that we do not lose them elsewhere for schooling and for subsequent careers. We need them here.

It is appropriate at this point, to make the Chamber of Commerce's position clear. Contrary to some opinion the Chamber is not an organization functioning solely for business interests but rather is an agency which seeks to build and mold a bigger and better community for all of us, thereby serving its membership.

In fulfilling this aim for a better community, we met recently and many of you were present at that meeting to consider the pressing need for adequately trained men and women for the Memphis labor market. The highest compliment paid to that endeavor was a statement by E. C. Stimbert, Superintendent of Memphis City Schools, recognizing the meeting in his words, and I quote: "The most important one held in Memphis in 100 years." We are continuing this endeavor with this smaller group seminar approach where we can get into the matter.

We are here today because we will not be content with Memphis being a second or third-rate city. Memphis is and deserves to continue to be a first-rate community. This seminar has been called to assess just how far we have come in the vital matters of education and sufficient and properly trained personnel to man the businesses and industries we have and those who are interested in coming here.

We hope also to determine in what direction we are going or in what direction we need to be going so that the Memphis of one, two and three generations hence will look back and be grateful that there were men of vision at work for a better Memphis in 1966.

A brief history of what brings the Chamber into this picture–additive to the fact of our interest in anything that will better the community–will show it was, first and foremost, as a matter of service to our own members. It was also a feeling of slight frustration experienced when the Chamber, along with many, many other groups in Memphis, was working so diligently to woo the Atomic Energy Commission and secure for Memphis the proposed multi-million dollar accelerator. We found to our slight embarrassment when we looked about for an inventory of our educational offerings that it was in the community but no one could put their hands on it. This gave additional impetus to this committee's feeling that certainly we could not properly represent that element of our attributes without such an assessment. A final reporting of these endeavors, which have enlarged since we set out to get that simple inventory, will be given by Dr. Colmey later.

Of course, as always, when you open one can of beans you find that each bean allows itself to be opened and here we go. This is fine. We must know what our problems are and try to give them dimensions if we are to deal with them. This is what we are trying to do. Once again, the Chamber is not trying to get into the education business or the personnel business; but, the Chamber, while the Atomic Energy Commission motivated inventory was going on, had an indication from some of its members that they were experiencing certain difficulties relative to obtaining personnel of certain types and of keeping them. Even if they did not lose them from the community, they were losing them to their good friends. This form of polite piracy is something we are all familiar with. It is a healthy sign and means that our employment level is high. But it is healthy only up to a

point and then it begins to suggest that it might turn about on you and cause a problem.

This is what we are trying to explore and to that end a questionnaire to assess the level of the problem was circulated to the membership of the Chamber. Following up on that, some professional talent was brought to bear; and a report will be given on the findings in that connection. Essentially, it was corroboratory of what had been surmised; namely, to a degree, our own success in terms of full employment is something we should very methodically and in a very calm fashion begin to deal with and set out to create a circumstance or a posture such that we cannot be halted as a market area where there is no relatively equal pool of capable and competent people upon which to draw when one seeks to assess us. It is our hope that we can secure from the seminar activity that will take place today some directions in which to proceed which are fruitful. We are hoping to introduce the problem to the solution sources. On one hand we have the industrial-commercial-business community and on the other hand, the educational area, which as referenced here extends in all directions to cover the classroom, training on the job, apprentice programs and many others.

Each of you will be able to take with you a copy of each of the two reports that you will hear this morning. These you may have and these we hope you will see that others see and have an opportunity to understand. Unfortunately, as with all matters of import, they can't be simplified to just a simple sentence-statement.

One interesting point, corroboratory of general levels of employment, is that our circumstance here in Memphis is such that we have less unemployment than the national average. The national average is 3.9% and ours is 2.7%; these are approximate figures. This bears a relationship of 30% less than the national average as reported in one of these reports we will hear this morning.

The seminar approach is desirable because we can have the give and take. There are reporters in connection with the seminar efforts, and there will be a record of this meeting. This is being accomplished through the cooperation of the Central Midwestern Regional Educational Laboratory. We will say more about them later, but we want to acknowledge them in the beginning as well as at other points during the course of our endeavors today. There will be a report covering the activities of this seminar, and we are hoping that this report can help us accomplish some of the things we have set out to do. It will answer some of the questions the business and commercial community are asking and tell them where in the community they can receive assistance of the type they say they are seeking. Similarly, those who have the capabilities to offer assistance will see a dimensioning of the need and, perhaps, can more logically tailor their offerings.

Those, such as the Chamber, who wish to do what they can to assist and have considerable capability and energy to offer require direction. The effort must not work against itself in all directions at once, nor gear up and run out in all directions. Of course, no forward motion issues from this. The hope is that groups, such as the Chamber, can do everything possible to assist in the implementation phase, after the involved groups decide what they wish to do. This is what brings us here.

We are ready to hear at this time two research reports that the Chamber Education Committee has encouraged and has looked forward to for a period of time. The first is on Educational Facilities presented by Dr. James Colmey, Director of the Bureau of Educational Research and Services at Memphis State University. The second report is on manpower: Memphis-Shelby County Manpower Survey, presented by Dr. Wayne Newkirk, Professor of Economics at Memphis State University.

EDUCATIONAL FACILITIES

James W. Colmey

Intelligent decisions regarding location or expansion of business and industrial enterprises require accurate information. The importance and availability of education have been placed in a position of high priority. Misunderstandings and misrepresentation of the facts sometime occur as to the amounts and kinds of education available in a community. Since Memphis and Shelby County represent the heart of the Mid-South area, information concerning existing educational programs and facilities are of value to business and industry in Memphis and Shelby County and also have implications for the surrounding area.

Although depth analyses of various programs will be explored in future studies, this report is limited in its objective to providing the following *educational information:* (1) existence or absence of various types of programs; (2) governing authority; (3) number of students involved; (4) types of employees involved; (5) relative financial data; and (6) a general inventory of land and buildings.

This report is intended to provide two useful functions. First, it provides information regarding items that are important in decision-making that are more comprehensive than traditional educational inventory studies. In addition to the basic information in the six tables in the Appendix, important data have been collected regarding Naval Air Technical Training Center, Manpower Training and Development Programs, Bureau of Apprenticeship Training, Evening School Vocational Education, and Distributive Education Programs. Secondly, since this study makes available machine-useable data for general types of educational programs by control, size, amount, and location, depth and trend studies can be made without repeating efforts to obtain the control data obtained in this study.

Education in Memphis and Shelby County

One out of every three residents of Memphis and Shelby County between the ages of five and sixty-five are participating in some type of formal education. Some of these individuals are studying on a part-time basis, but the majority are studying on a full-time basis. In the fall of 1965, more than three thousand children attended preschool programs and an additional 103,931 boys and girls were participating in full-time public and private elementary education programs. There were 55,140 participating in full-time secondary school programs, and 25,902 individuals were participating in programs beyond the high school level. The institutions reporting in this study were educating approximately 98 per cent of the individuals that were participating in organized educational programs in Memphis and Shelby County in 1965.

In judging the scope of education and size of the educational business in Memphis and Shelby County, it is interesting to note that the financial support of institutions is approaching the point where current educational expenditures in 1966 are approximately $100,000,000 annually with monthly payrolls of nearly $4,000,000 for approximately 12,000 employees.

As both the private and public sectors attempt to meet the increasing demands on education the public sector has been required to assume a greater responsibility for mass education. Nine out of ten individuals enrolled in formal education programs in Memphis and Shelby County attend public institutions. It is significant to note, however, that important private education programs exist and are encouraged. While the percentage of individuals attending private institutions has been decreasing, the number of individuals attending these institutions has been increasing.

Preschool, Elementary, and Secondary Education

The Memphis City School System is the fifteenth largest and one of the fast-

est growing school systems in the country with a 1966 enrollment of 121,032 students taught by 4934 teachers. The large Shelby County School System enrolls 40,742 students and employs 1,559 teachers. School officials in both school systems have shown excellent leadership in meeting the present challenges of community growth and development.

Private institutions educate approximately 12,000 elementary and secondary school students. Eighty-four privately licensed preschool programs provide education for 2,984 boys and girls. More than 80 per cent of these students attend religious institutions.

Higher Education

In its massive expansion program Memphis State University has been meeting the challenges of Mid-South business and industrial expansion. In recent years, the University has tripled in size with more than 14,000 students enrolled in the fall term of 1966. About 900 of these students are doing advanced work in the graduate schools of Arts and Sciences, Business, Education, Engineering, and Industrial Technology. A new law school has been established and accredited. Doctoral degree programs are offered in the fields of education and psychology. Over 3,000 students are preparing for teaching careers.

The Memphis Medical Center is the South's largest. The University of Tennessee Medical Units enroll approximately 2,000 professional students in their excellent medical, dental, pharmacy, and nursing schools. In addition to these degree programs, numerous courses are offered to students in various other areas of the health field to supply trained personnel for the medical center and related industries.

Private non-profit institutions of higher education are also flourishing and making a major contribution to the area. Christian Brothers College has an enrollment of 1,053 and its business and engineering programs make a special contribution to the economy of the community. Southwestern-at-Memphis enrolls 1,019 students in its nationally-recognized predominantly liberal arts program.

Other major institutions of higher education located in Memphis include LeMoyne College, Owen College, Siena College and Southern College of Optometry. Memphis Academy of Arts contributes to the cultural objectives of the community. Religious workers are trained in the Harding College of Bible, Memphis Baptist College, Memphis Christian College, Memphis Theological Seminary and the Mid-South Bible College.

Numerous post-high school institutions that have been incorporated for profit reported that they were educating 4,439 students in the city and county in 1965.

Naval Air Technical Training Center

The Naval Air Technical Training Center at Memphis is the headquarters of the Chief of Naval Air Technical Training with technical training schools and detachments located in many states, extending from Maine to Oahu. There is a total of nine subordinate commands training a total of 32,000 technicians in the resident schools and 10,000 in the field schools each year. The nerve center of this vast military vocational training program focuses on the Memphis base and gravitates from this headquarters operation.

Memphis is the base for the largest activity within the Naval Air Technical Training services. Nearly 12,000 officers, sailors and Marines are assigned to this Training Center located at Millington, Tennessee, in Shelby County, including students, instructors and support personnel.

The center contains 13 schools, the majority of which are basic schools designed to provide trainees with technical knowledge and skills required of Third Class Petty Officers. These students are generally newly enlisted sailors who have completed their basic military training and have been assigned to the Center because of aptitude, ability and interest.

Other schools at the Center provide technical knowledge and skills required of First Class and Chief Petty Officers as well as specialized areas for Commissioned Officers. Technical training is accomplished by the Training Depart-

ment that is sub-divided into four major types of training, including Electronics, Mechanical, Operational and Clerical. The school week is a scheduled 40-hour week with provisions for night classes for students desiring extra help.

Many discharged naval personnel have remained in the community and have supplemented both industry and education with their technical "know-how." The base itself serves as an available laboratory for school people and businessmen who wish to view their vocational-technical training methods and materials.

Manpower Training and Development Program

The local Employment Security office, as the agency to contract for training, provided by the Manpower Training and Development Act, contracts with the Memphis City School System to provide vocational education and training in certain critical labor areas. The specific training areas depend upon the shortage of trained persons available for employment and the character of the unemployed available for training. This cooperative effort of education and labor provided vocational education for 480 students during 1965.

Classes were divided into two categories:

(1) Adult classes for the retraining of persons who were without salable skills were held for 280 adults, and

(2) Youth classes, which provided training for 200 from the 18-21 year old group, were held for those needing entry level skills to secure employment.

These classes are held at the Memphis Area Vocational-Technical School. Students attend classes in specific occupational skill areas ranging from Chef's Training to Service Station Mechanic and Automobile Body Repair and in remedial basic education classes. Students attend eight hours a day for five days a week until they obtain an entry level proficiency in a particular skill. Most students are eligible for a training allowance through the Tennessee Employment Security Office while in training. Plans are continously being projected to incorporate new courses as they are needed. The Tennessee Employment Security Office, 1295 Poplar Avenue, and the Youth Opportunity Center, 41 N. Cleveland St., serve as the recruiting agencies and the placement centers after training is completed.

Bureau of Apprenticeship Training

A new opportunity for vocational training was introduced in Memphis in 1965. This training, which comes under the auspices of the Labor Department's Bureau of Apprenticeship Training, offers the trainee an opportunity to receive "on-the-job" training in an industry. This training is usually supplemented by related vocational education under the direction of professional vocational educators.

Business and industry cooperating with the Bureau of Apprenticeship Training offer vocational training in certain basic skills. These companies receive supplemental financial benefits in the pool of available, trained employee prospects as the apprentices complete their training.

The student-trainee is accepted by a cooperating business or industry as an apprentice-trainee and is supervised by a regular employee. Generally, the trainee will be placed in a position which will prepare him for full-time employment when he successfully fulfills his training period. The student receives practical training experiences during the apprenticeship, receives wages for his services and has an excellent chance for regular employment when training is completed.

Having begun the program in 1965 with a token enrollment, the Bureau of Apprenticeship Training expects up to 600 apprentices to be in training by early 1967. The first trainees to complete their apprenticeship entered the labor market in 1966. Placement and recruiting of trainees is under the local division of the Bureau of Apprenticeship Training.

Memphis Area Vocational-Technical School

A state-supported Area Vocational-Technical School (591 Washington Avenue) is operated by the Memphis City Schools under contract with the State of Tennessee. It provides adult vocational training in regular full-time day classes and

evening vocational classes.

Under provision of the Tennessee Trades and Industries program and supplemented by the Memphis City School's adult evening program, this school provides training for the purpose of upgrading existing skills as well as basic entry-level vocational training in other skills. Students meet twice each week for either one and a half or three hours.

Attendance in these courses during the calendar year 1965 was 4,098 adults. Future plans include course offerings during the summer quarter which will provide additional training opportunities. Courses range from small gas engine maintenance, power mowers and outboard motors, to upholstery that may be vocational or avocational. Special courses for vocational upgrading are exemplified by blueprint reading, math, business, and commercial courses. A professional instructional staff includes specialists in each particular area of instruction.

City High School Vocational Education

Memphis Technical High School and Booker T. Washington High School hold evening courses during the regular academic school year. These two evening centers are principally evening school programs for high school credit and are designed for the school "drop-out" who failed to obtain a high school diploma. Course offerings range throughout the general high school curriculum in addition to the vocational courses. Booker T. Washington registers nearly 1,000 adults in vocational courses annually. Memphis Technical High School has an annual enrollment of over 3,000 students in evening school offerings.

Students registering at these evening vocational centers are eligible to attend any class through the payment of a $5 fee. The only additional charges are for materials actually used by the student during the course of his training. The trend is for increased offerings and fuller utilization of present facilities.

Local high school curricula include distributive education which is a form of vocational education aimed at training high school students in the ways of marketing and distribution. It is a cooperative venture between the school and business.

During the 1965-66 school year this program offered junior and senior students in nine high schools an opportunity to study merchandising. Through a cooperative agreement between business and the schools, the student spends one portion of his school day in the classroom and the other portion working as a trainee in one of the cooperating neighborhood businesses. Not only does this work constitute the laboratory portion of the student's day (for which he receives school credits) but it also provides an additional benefit in the form of wages received for his services.

Conclusion

This 1965 study of educational facilities indicates clearly that one of the largest untapped resources in Memphis and Shelby County is in the area of vocational and technical training. Though important vocational and technical programs exist, they are not sufficient to meet existing needs. It is reasonable to assume that half or more of the graduates from local high schools could make a greater contribution to the economy of this community if they successfully completed post high school education programs of this type. At least five thousand local high school graduates should be attending these programs. Also, included in this manpower resource are the thousands of adults who need continuing or rehabilitating education.

State and local educational leadership have taken important steps to provide essential vocational and technical education within Shelby County. In addition to the traditional vocational programs offered in Memphis high schools, the Memphis Area Vocational-Technical School was established in 1963. This school is operated by the Memphis Board of Education and financed through a contract with the State of Tennessee.

In 1967, a 1.5 million dollar vocational school will be constructed on a site now occupied by the Merrill Elementary School at 303 Jones Avenue. It will be operated by the Memphis Board of Education with state financing and will replace

the Memphis Area Vocational-Technical School at 591 Washington. Schools of this type are also being established in several locations in rural West Tennessee and should improve the capability of the man-power resources from the surrounding area.

Another 1967 state project will provide a two million dollar technical institute at the Shelby County Penal Farm site near the intersection of Interstate 40 and Macon Road. This two-year post high school educational program is designed to supply the business and industrial demand for highly skilled technicians and award the graduates with an Associate Degree in such subjects as computer programming and drafting. Construction, data processing, health, editorial, secretarial, and other technical fields of study should relate to the technical institute for two-year degree programs and to colleges for four-year degree programs. Even though salaries of persons with these skills have risen rapidly in the past decade, positions for qualified persons still go unfilled.

These programs are critical to business and industry. The future economy of Memphis is directly dependent on the development of programs of this type. Some extremely large businesses can and do provide much of this type of education for their own employees. Most businesses and industrial enterprises, however, are dependent on government agencies to develop individuals with essential vocational and technical skills. Certainly development and expansion of these programs should receive the full backing of the community.

Memphis and Shelby County are increasing in population and expanding more rapidly than many other communities. Therefore their position in regard to the expansion of education should be an aggressive one. This includes all education not merely in areas where glaring omissions are identified and known. Education needs to be developed and expanded from the preschool through the adult continuing education programs.

The public school programs in Memphis and Shelby County are expected to expand to meet the needs of nearly 200,000 children from kindergarten through twelfth grade. This anticipated expansion is based upon the following assumptions: (1) the population of Memphis and Shelby County will continue to increase; (2) students that normally have been dropping out of school will stay in school longer; and (3) the demand for kindergarten programs will increase. An expanding school system has greater financial needs than a school system that has an unchanging enrollment. Usually this support is delayed by several years and the community suffers by this lag. Business leaders should not allow this to happen in Memphis.

America's major cities each have within their city limits one or more nationally-recognized institutions of higher education. This is an essential requirement in fulfilling the heavy demand for engineers, lawyers, accountants, economists, dentists, doctors, teachers, scientists, and other professional personnel. Memphis has developed such institutions but must continue to aggressively support them as the city continues to prosper and expand.

With major community support, Memphis State University can be expected to enroll 20,000 students within the next five years and to take its rightful place among the nations leading universities as vital new law, engineering, and doctoral degree programs rapidly grow into maturity. The University of Tennessee Medical Units have through the years produced outstanding graduates in the health fields but more support will be needed to meet the higher costs of the more demanding and complex requirements of today's medical schools. Each of the private institutions of higher education carry out unique roles that are important to the welfare of large, dynamic, cosmopolitan cities. They require and should have the support of the entire community.

Memphis and Shelby County can be proud of the education that they provide for their citizens. Business and industry in Memphis and Shelby County, however, should share with and assist educators in three of their major concerns: (1) insufficient vocational and technical education; (2) expansion of all education programs to keep pace with population increases; and (3) adding necessary quality to programs where it is needed.

SURVEY PROCEDURES

General survey methods were utilized for the gathering of the data reported in this study. These general survey methods, however, were augmented by more pointed efforts to collect complete data for the entire sample and more pointed efforts to focus the questionnaire upon the information wanted. Since the purpose of the study was to collect baseline data, several conferences were held to determine what baseline data could best be utilized in surveying educational facilities and offerings in any particular area. These conferences were directed toward the building of a questionnaire which had little ambiguity and which was concise enough for the assumption that most of the school people in the sample would be willing to respond.

After the questionnaire was composed and tried out, the questionnaire was then put into form for easy (data-processing) coding. An effort was made to send the questionnaire to all schools that could be identified in Memphis and Shelby County. Identification of these schools was made through the telephone directory for private sources, through the two Boards of Education for public sources, and through two large Catholic schools for parochial sources.

The questionnaires were first sent through mail with an accompanying letter from the Chamber of Commerce in November, 1965. This first sampling of the schools revealed some 62 per cent returns, however, the financial questions at the end of the questionnaire were often not answered as reflected in these tables. A second mailing of the questionnaire was made to those schools who did not respond and efforts were made to further complete the questionnaire through visits to the Boards of Education. These visits to the Board of Education of both Memphis and Shelby County schools obtained information which could be put into the form that was requested on the last two financial questions.

The second sampling of the schools revealed an additional 28 per cent of the data. Since some schools did not respond, individual telephone calls were then made to these schools to obtain the information needed on the questionnaire. After all of the efforts to gather as much of the data as possible, some 94 per cent of the schools included an estimated 98 per cent of the student population presently enrolled in schools in the Memphis area.

CATEGORY DEFINITIONS

Preschool
Includes those institutions offering an educational program for children five years of age and under.

Elementary
Includes grades one through six.

Secondary
Includes grades seven through twelve.

Higher
Includes those institutions listed by the U. S. Office of Education Directory for Higher Education.

Post High School
Includes institutions designed to offer specific programs of continuing education to high school graduates or students over sixteen years old who are not attending secondary school programs.

Professional Employees
Degree holders.

Non-Professional Employees
Non-degree holders.

Enrollment
Students enrolled in November 1965.
Building Space
Estimated in terms of thousands of square feet.
Land Usage
Estimated to the tenth of an acre.
Proprietory
Private, profit-making sponsorship.
Non-Proprietory
Private service sponsorship.
City
Memphis Metropolitan Government.
County
Shelby County Government.
State
Tennessee State Government.
Corporation
Includes those institutions legally incorporated and not shown in one of the other categories.
Society, Business, Agency
Includes individual, industrial and commercial sponsorship.
Religious Sectarian
Includes denominational church sponsorship.
Religious Non-Sectarian
Includes non-denominational church sponsorship.
Association, League, Profession
Includes civic and professional group sponsorship.

Footnotes on Table 1 refer to total data used in compiling all of the tables.

TABLE I

TOTAL ENROLLMENT IN PUBLIC AND PRIVATE EDUCATIONAL INSTITUTIONS
IN MEMPHIS AND SHELBY COUNTY BY TYPE OF CONTROL AND BY
TYPE OF PROGRAM REPORTED IN THE FALL OF 1965

TYPE OF CONTROL	TYPE OF PROGRAM*									
	TOTALS		ELEMENTARY		SECONDARY		HIGHER		OTHER	
	Replies	Enroll.	Replies	Enroll.	Replies	Enroll.	Replies	Enroll.	Replies	Enroll.
PUBLIC										
City	116	118,364	84	74,296	31	42,848	None		1	1,220
County	53	40,088	40	25,429	13	14,659	None		None	
State	2	14,914	None		None		2	14,914	None	
PRIVATE										
Proprietory										
Corporation	7	2,428	2	270	2	595	2	1,048	1	515
Society, Business, Agency	3	1,177	None		None		None		3	1,177
Other	1	382	None		None		1	382	None	
Non-Proprietory										
Religious Sectarian	27	12,769	15	6,508	7	3,580	5	2,681	None	
Religious Non-Sectarian	7	1,691	3	333	1	198	3	1,160	None	
TOTALS	216	191,813	144	106,836	54	61,880	13	20,185	5	2,912

* In the fall of 1965, public preschool programs enrolled 276 students and 84 licensed preschool programs enrolled 2,984 students.

TABLE 2

NUMBER OF INSTITUTIONS IN PUBLIC AND PRIVATE EDUCATIONAL INSTITUTIONS IN MEMPHIS AND SHELBY COUNTY BY TYPE OF CONTROL AND BY SIZE OF ENROLLMENT REPORTED IN FALL OF 1960 AND 1965

TYPE OF CONTROL	TOTAL REPLIES		SIZE OF ENROLLMENT									
			1-99		100-399		400-1599		1600-3000		More Than 3000	
	1960	1965	1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
PUBLIC												
City	67	116	1	2	11	13	45	87	10	14	0	0
County	48	53	2	2	16	16	28	34	2	1	0	0
State	2	2	0	0	0	0	0	0	1	1	1	1
PRIVATE												
Proprietory												
Corporation	7	7	2	3	5	3	0	1	0	0	0	0
Society, Business, Agency	3	3	1	1	2	2	0	0	0	0	0	0
Other	1	1	1	1	0	0	0	0	0	0	0	0
Non-Proprietory												
Religious Sectarian	18	27	3	4	9	10	6	13	0	0	0	0
Religious Non-Sectarian	5	7	0	0	2	3	3	4	0	0	0	0
TOTALS	151	216	10	13	45	47	82	139	13	16	1	1

TABLE 3

PERCENTAGE OF INSTITUTIONS IN PUBLIC AND PRIVATE EDUCATIONAL INSTITUTIONS IN MEMPHIS AND SHELBY COUNTY BY TYPE OF CONTROL AND BY NUMBER OF FULL-TIME EMPLOYEES REPORTED IN THE FALL OF 1960 AND 1965

TYPE OF CONTROL	NUMBER OF FULL-TIME EMPLOYEES											
	Total		0-10		11-30		31-50		51-90		More Than 90	
	1960	1965	1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
PUBLIC												
City	37.23	53.36	4.38	5.06	16.79	17.02	7.30	14.26	6.57	12.88	2.19	4.14
County	35.04	24.38	16.06	8.28	11.68	7.36	5.11	5.06	2.19	3.22	.00	.46
State	1.46	.92	.00	.00	.00	.00	.00	.00	.00	.00	1.46	.92
PRIVATE												
Proprietory												
Corporation	5.11	3.22	2.92	1.38	2.19	1.38	.00	.46	.00	.00	.00	.00
Society, Business, Agency	2.19	1.38	2.19	.92	.00	.46	.00	.00	.00	.00	.00	.00
Other	.73	.46	.73	.46	.00	.00	.00	.00	.00	.00	.00	.00
Non-Proprietory												
Religious Sectarian	13.87	12.42	4.38	4.14	5.11	4.60	3.65	2.30	.00	.92	.73	.46
Religious Non-Sectarian	5.38	3.22	.00	.46	.73	.92	.73	.92	.73	.46	2.19	.46
TOTALS	100.00	100.00	30.66	20.70	36.50	31.74	16.79	23.00	9.49	17.48	6.57	6.44

TABLE 4

PERCENTAGE OF INSTITUTIONS IN PUBLIC AND PRIVATE EDUCATIONAL INSTITUTIONS IN MEMPHIS AND SHELBY COUNTY BY TYPE OF CONTROL AND BY NUMBER OF PROFESSIONAL EMPLOYEES REPORTED IN THE FALL OF 1960 AND 1965

TYPE OF CONTROL	Total		0-10		11-30		31-50		51-90		More Than 90	
	1960	1965	1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
PUBLIC												
City	43.66	53.36	14.80	13.34	16.28	15.64	6.66	12.88	4.44	7.82	1.48	3.68
County	36.26	24.38	21.46	12.42	10.36	6.90	2.96	2.76	1.48	1.84	.00	.46
State	1.48	.92	.00	.00	.00	.00	.00	.00	.00	.00	1.48	.92
PRIVATE												
Proprietory												
Corporation	3.70	3.22	2.96	1.84	.74	1.38	.00	.00	.00	.00	.00	.00
Society, Business, Agency	2.22	1.38	2.22	.92	.00	.46	.00	.00	.00	.00	.00	.00
Other	.74	.46	.74	.46	.00	.00	.00	.00	.00	.00	.00	.00
Non-Proprietory												
Religious Sectarian	8.88	12.42	2.96	5.06	3.70	4.14	1.48	1.84	.00	.92	.74	.46
Religious Non-Sectarian	2.96	3.22	.00	.92	.74	.92	.74	.46	.74	.46	.74	.46
TOTALS	100.00	100.00	45.14	34.96	31.82	29.44	11.84	17.94	6.66	11.04	4.44	5.98

TABLE 5

NUMBER OF PUBLIC AND PRIVATE EDUCATIONAL INSTITUTIONS IN MEMPHIS AND SHELBY COUNTY
BY TYPE OF PROGRAM AND BY SIZE OF ENROLLMENT REPORTED IN FALL OF 1965

TYPE OF PROGRAM	TOTAL REPLIES	SIZE OF ENROLLMENT					
		0-99	100-199	200-399	400-1599	1600-3200	OVER 3,200
ELEMENTARY	144	8	9	26	96	5	0
SECONDARY	54	1	2	5	36	10	0
HIGHER	13	3	1	2	5	1	1*
OTHER	5	1	2	0	2	0	0
TOTALS	216	13	14	33	139	16	1

* Current enrollment 14,200 for Memphis State University

TABLE 6

ANNUAL CURRENT EXPENDITURES AND AVERAGE MONTHLY PAYROLL FOR PUBLIC AND PRIVATE EDUCATIONAL INSTITUTIONS IN MEMPHIS AND SHELBY COUNTY BY TYPE OF EDUCATIONAL PROGRAM REPORTED IN FALL 1965 FOR THE 1964-65 EDUCATIONAL YEAR

TYPE OF PROGRAM	TOTAL REPLIES	ANNUAL CURRENT EXPENDITURES	AVERAGE MONTHLY PAYROLL
ELEMENTARY	132	$24,366,340	$1,696,615
SECONDARY	43	12,869,083	1,059,808
HIGHER	12	55,763,717	1,301,861
OTHER	17	702,830	78,276
TOTALS	204	$93,701,970	$4,136,560

MEMPHIS-SHELBY COUNTY MANPOWER SURVEY

Thomas O. Depperschmidt, Wayne Newkirk

This report is a follow-up of a survey made by the Education Committee of the Memphis Area Chamber of Commerce. The Committee held an open meeting of the Chamber membership on September 27, 1966, to apprise the membership of the impending problem of a low level of unemployment and the need for educational facilities to strengthen the development of human talents in the community. A one-page questionnaire (see page 28) was distributed among members present. An additional distribution was made to each of approximately 2,100 member-firms. Information was requested concerning personnel requirements and the level of education desired for filling the manpower needs. Nearly 400 of the questionnaires were returned and the authors have assumed the responses were from firms representative of the most obvious and serious personnel needs. The information requested in the original survey was general in nature and a decision was made to investigate the responses more fully.

A sample of 31 firms was selected from the first 350 replies. Eliminated from consideration were replies from 62 firms that expressed only general personnel needs, not specific, numerical needs. The 31 replies chosen were selected as representative of the major industrial groups found in the Memphis-Shelby County area.

The size of the firm, as measured by the number of employees, was one stratified element emphasized. Analysis of the replies revealed some correlation between size and the nature of the industrial operations of the firm. Smaller firms were typically retail or professional establishments whereas the firms employing the largest numbers of personnel were typically in manufacturing or distribution. Four size categories were chosen, determined by the size of the current labor force. The classification schema was as follows:

1	–	49	employees	A Class
50	–	199	employees	B Class
200	–	499	employees	C Class
500 or more employees				D Class

To provide a realistic, representative sample of employment needs by type of skills required in this area, five firms were selected from Class A, six from Class B, nine from Class C, and eleven from Class D. Comprehensiveness of the sample is exhibited by the following display of data:

	A	B	C	D	Total
Number of Replies by Class	179	64	29	16	288*
Total Employees	3,510	6,880	9,023	26,803	46,216
Number of Firms In Sample	5	6	9	11	31
Number of Employees In Sample	65	483	2,516	21,258	24,322
% of Employees to Total in the Class	1.9	7.0	27.9	79.3	**

* Of 350 replies, 62 could not be used.

** The sample firms include 52.6% of the employees represented by the 288 firms from which replies were used.

The 31 sample firms were contacted for personal interviews by one of the members of the research team during the period October 25 to November 4. Interviews were conducted using a questionnaire-checklist of items considered to be significant in determining the nature of manpower needs, educational specifications for the job vacancies, and general employment or hiring practices.

SURVEY FINDINGS

The personal interview technique revealed five major areas of concern facing the business firms in the Memphis area.

First, there is a definite and serious shortage of skilled personnel in several occupational areas. Professional and semi-professional people are sorely needed in all phases of the medical and para-medical field; in various sub-professional and technical fields, such as draftsmen and technicians for engineers; and, in the technically trained, lower management levels in all industries. There is also a shortage of skilled manual operatives especially in the printing trades, in all phases of machine operations, and in maintenance trades.

Secondly, many firms apparently are "getting by" with lesser-qualified people in their operations because more highly-trained personnel are not readily available. Invariably, the firms employing the lesser-qualified indicate a willingness to hire more qualified or more skilled personnel if and when these persons are available. Educational requirements are being relaxed by some firms in an effort to overcome the manpower shortage. The loss of efficiency, the cost of overtime, and changes in productional or operational techniques necessitated by the employment of the less able personnel are difficult to quantify but are real deterrents to a firm's willingness and ability to expand its facilities.

Thirdly, on-the-job training facilities are widespread and often elaborate. The typical firm prefers to do some of its own training of new personnel, however, it may not wish to underwrite the entire expense of complete vocational training. A preference was stated for job applicants with a degree of basic skills that could be developed in the specialized areas required by the firm. Most frequently preferred by the firms in the sample is vocational training in a broad range of basic skill areas.

Fourthly, most of the business firms included in the survey anticipate excellent growth prospects. More than a few of these firms, furthermore, express a concern that the realization of this growth potential might be limited by the shortage of qualified personnel.

Finally, there is concern on the part of the business firms interviewed about the type of vocational direction provided by secondary school teachers and school guidance counselors. The firms feel the absence of skilled manual workers on the one hand and the evident emphasis on "higher education for everyone" on the other hand points to a peculiar dilemma for the counselor of the marginal student. It is the contention of several businessmen included in the survey that high school guidance counselors are unrealistic regarding industrial needs and the probable maximum attainable level of work skills that can be acquired by students to fill the needs.

An analysis of the questionnaire replies indicates substantial personnel needs among small firms (less than 50 employees) for professional, clerical, skilled, and especially sales personnel. The same needs are expressed by Class B (50 to 199 employees) firms generally with increased needs in the unskilled category of personnel. It may be surprising that Class C (200-499 employees) firms indicate a lesser general need for personnel and evidence a greater proportion of vacancies at the supervisory-managerial levels. In the largest firms (500 or more employees) the emphasis is on professional employees, sales workers and skilled workers. (Table II)

A total of 2,269 job vacancies was reported in the replies from 288 employing firms in the community. Of these, 1,198 are current vacancies. For firms of all

sizes, the most pressing needs are for sales workers (27% of the current total need), skilled workers (22.0%), semi-skilled laborers, and professional employees. Nearly 50% of all current vacancies are for sales personnel and skilled workers. (Table II)

Further understanding of the nature of the needs can be gained by considering the data of Table IV. Table IV reports the methods used by Memphis firms in advertising employee needs. Nearly all of the firms advertise locally for workers to some extent, and most of the firms advertise outside of the Memphis area. The reported results of these campaigns are disappointing. A representative of one of the largest manufacturers, when asked how many skilled workers he would hire if they suddenly became plentiful, said he may as well ask for a hundred skilled workers as to ask for one since he could not find even one worker. Similar shortages of assistants to engineers are also declared; these technicians simply are not available. It is believed, however, the engineering graduates are nearly adequate to satisfy the present needs; but the supporting personnel are non-existent. Machinists, tool and die makers, and the more advanced machine operators are also scarce.

The Memphis area is not unique in experiencing a shortage of medical personnel. The most acute need reported is for registered nurses, but a critical shortage also exists for all categories of medical technicians, medical records librarians, and hospital maintenance personnel. Medical and para-medical personnel needs are more complex because of the traditional lower salary payments, but the level of compensation is not the overriding difficulty. The pool of trained personnel is not sufficient to draw from.

The future of the industrial community as indicated by the anticipation of growth among the industries included in the survey is of significance in projecting personnel requirements. Immediate growth in business volume (less than one year in time) is expected by approximately three-fourths of the firms interviewed. In the largest firms, classification "D", about 90% reported plans for expansion and nearly 90% of the Class C firms expected expansion during the next year. Expansion of the larger industrial organizations is particularly significant since these are the firms requiring the greatest number of new employees. The anticipated growth rate among these firms ranged from a nominal 3–5% to a 33% expansion, but a rough correspondence exists.

The attempt to project long-term growth (up to ten years) proved more difficult. The largest firms' growth, particularly in manufacturing, is especially difficult as market projections are not normally complete for ten years in advance. Nevertheless, the executives from more than half of the firms envision significant growth in business volume and personnel needs for the distant future. In contrast, the smaller firms were not able to make any predictions relating to growth.

However, for the majority of the firms, future personnel needs are more directly related to patterns of growth than to needs due to retirement. Most firms stress the youth of their labor forces. The projection for ten years reflects a natural need for replacing retirees; about one-third of the firms noted this allowance.

Cyclical (changed demand) needs for personnel are not considered prime factors in assessing personnel needs. The lack of concern for cyclical variations may be attributed, in part, to the absence of experience with the adverse effects of cyclical variations on the part of firms in the survey. It is apparent that those firms reporting some effect of cyclical activities referred to normal, annual seasonal variations.

Estimates of loss-of-sales by firms because of personnel shortages were more difficult to obtain. Admittedly, the "non-existence of greater sales or business activities" defies quantification. The most frequently heard statement of the problem is "we know we could do better if we had more personnel." Estimates of the losses vary from "very nominal" to "quite substantial." Some firms indicated the level of present demand could justify new contracts, new facilities, or new geographical areas of operation if personnel levels permitted the expansion. The firms recognizing a loss of sales made up 51.6% of the survey sample and are firms that normally go to the public to sell (such as on a contract or job basis) and business volume is directly related to sales effort. The firms that do

not note a loss of sales are institutions that depend upon the public to come to the establishment, such as most of the retail operations, the hospitals, the hotels and restaurants. This latter group depends more upon the use of overtime or the redoubling of effort to overcome the loss during peak periods.

Turnover is declared to be a serious problem by Memphis firms. The perennial job seeker apparently does not move out of the immediate area when he leaves one place of employment but remains to accept another position within the community. If the competitive wage scales reported by the firms in the sample are typical of the entire industrial community, the problem becomes one of employee maturity and ability to accept responsibility, virtues not easily taught in schools. These same firms find that local advertisements for employees are somewhat futile. The Tennessee Employment Security services provide more favorable results in providing job applicants.

Job specifications, as reported here, are in terms of minimum educational preferences. Only 9.7% of the firms favor a graduate degree (beyond the bachelor's degree). Significantly, these firms are in the "A" and "D" size groups. This finding may be the result of a bias injected by the stratification of the sample. The small number of firms reporting the need for an advanced degree is probably a result of the sample choice of few professional or psuedo-professional businesses. The very large firm would have greater-than-average need for the graduate degree person.

It can be assumed that firms have lowered their minimum educational standards due to the inability to secure persons at the level of education normally desired. The large firms indicate a strong preference for the vocationally trained person and for persons with distributive education or specialized non-credit courses appropriate to the job. More than 90% of the firms report an on-the-job training program. These same firms report a willingness to absorb at least a portion of the costs necessary to provide a program of continuing education.

CONCLUSIONS

The conclusions for this report are not cast as a summary of findings but primarily as recommendations implicit in the statistical data. Also noted are some of the more critical comments made by the business interviewees regarding education and employment.

There is no reason to assume that educational facilities in the Memphis area are not adequate to handle programs designed to alleviate the manpower shortage. The need for expansion of specific training facilities is evident. A problem may exist in attracting persons to the existing facilities. The expansion of programs most frequently indicated by the interviewees includes training in the printing trades, drafting and mechanical drawing, basic sales education, commercial subjects, electronics, various mechanical trades, air-conditioning, data processing (to include computer skills), and public speaking.

If the deficit in skilled personnel is not ascribed to an absence of educational facilities, it is apparent that part of the problem lies in the manner of use or in the failure to take full advantage of the facilities available. The failure on the part of the potential trainee to utilize the educational facilities to improve himself may denote a problem in communication between school authorities providing the facility and the potential trainee. During full-employment, the employer may relieve his anxiety temporarily but contribute to his own problem by accepting the lesser-trained individual to fill his job vacancies. It is the opinion of the authors that the Memphis Area Chamber of Commerce, through its Education Committee, may be in a unique position to forge a communication link between education and industry by formulating plans to convey information to potential skilled workers and to encourage or offer leadership in programs of self-improvement. It should not be assumed that the problem is entirely a lack of interest on the part of unskilled workers. Ignorance of job opportunities or of improvement facilities or of the need for improvement is often typical of the unskilled worker.

School authorities must exercise imagination to develop programs suited to the needs of the area industries and to "sell" their unique product–education–to the unwilling or unknowing public.

The authors must assume, for lack of other realistic solutions to the problem, that skilled manpower can be developed from the labor resources available in the Memphis area. This means, simply, that continued importation of laborers into the area cannot be economically justified. The only reasonable alternative to importation of workers is an intensive program to develop skills among workers already here.

Many specific recommendations were made by business leaders representative of the firms interviewed in this investigation. The comments made are not necessarily in agreement with the authors nor supported entirely by the data presented. The authors assume the responsibility for paraphrasing the comments. The comments may point to a need for improving the communications link between business and educators:

"There needs to be more emphasis on the 3 R's, and on science and math."

"There should be improved office training for those students headed in the direction of office employment."

"In some way, there should be a separation in treatment by high school authorities of those who are bound for college from those who *obviously* are not college material. The latter might be more justifiably (and mercifully) counselled to pursue manual training." A common complaint of business men hiring skilled, semi-skilled, and unskilled workers is that "guidance at the high school level often takes the form of encouraging all students to go to college, when in fact some are not capable of that level of education, and of failure to counsel students whose terminal education is high school about job opportunities and requirements."

"An attempt could be made by high school counselors to make working for a living attractive, and to remove any stigma associated with a person working with his hands."

"Students should be taught how to apply for a job, how to appear for an interview, what credentials to bring, etc."

"The colleges must accept the need for non-degree training." This is particularly emphasized for the health-related fields, where more programs of cooperation between colleges and universities in the training of medical personnel are urged. "Colleges might provide a two or three year basic training course in sciences or other fields leading to a degree conferred for a third or fourth year of work by a hospital in any of several areas of training: nurses, x-ray technicians, laboratory technicians, medical records librarians, physical therapists, and occupational therapists, to name several."

"There is a need for an expanded engineering curriculum to include sanitary and community planning engineering, along with the development of course programs for supporting technicians as a separate, non-engineering field."

"A hotel and restaurant school for managerial staff in this rapidly growing service industry is apparent."

"Increased emphasis is needed on undergraduate courses and curricula that differ from the traditional, especially in the form of workshops and seminars which give the individual the opportunity to express his talents and/or develop organizational and supervisory skills."

"Broadening and deepening of graduate programs is essential to attract potential employees who want to continue their education beyond an undergraduate degree."

The manpower shortage in Memphis-Shelby County is not of our own making. Many factors have contributed to the shortage, including the drain of the Viet Nam War, the encouragement selective service policy provides to students to stay in college, and government programs such as the Youth Corps and the Peace Corps. The business community of Memphis-Shelby County, however, by maintaining close communications and cooperation with the schools at all levels, can take meaningful steps to insure an adequate present and future labor supply for expanding industry with what we have here.

Memphis Occupation Survey
Education Committee of the Memphis Area Chamber of Commerce

Please check those occupational classifications that are most needed by your firm at this date and indicate the number of these employees that you could presently add to your personnel.

Professional	number:	____	moderate need	____;	urgent need	____
Semi-Professional	number:	____	moderate need	____;	urgent need	____
Managerial and Official	number:	____	moderate need	____;	urgent need	____
Clerical and Kindred	number:	____	moderate need	____;	urgent need	____
Sales and Kindred	number:	____	moderate need	____;	urgent need	____
Service	number:	____	moderate need	____;	urgent need	____
Skilled	number:	____	moderate need	____;	urgent need	____
Semi-Skilled	number:	____	moderate need	____;	urgent need	____
Un-Skilled	number:	____	moderate need	____;	urgent need	____

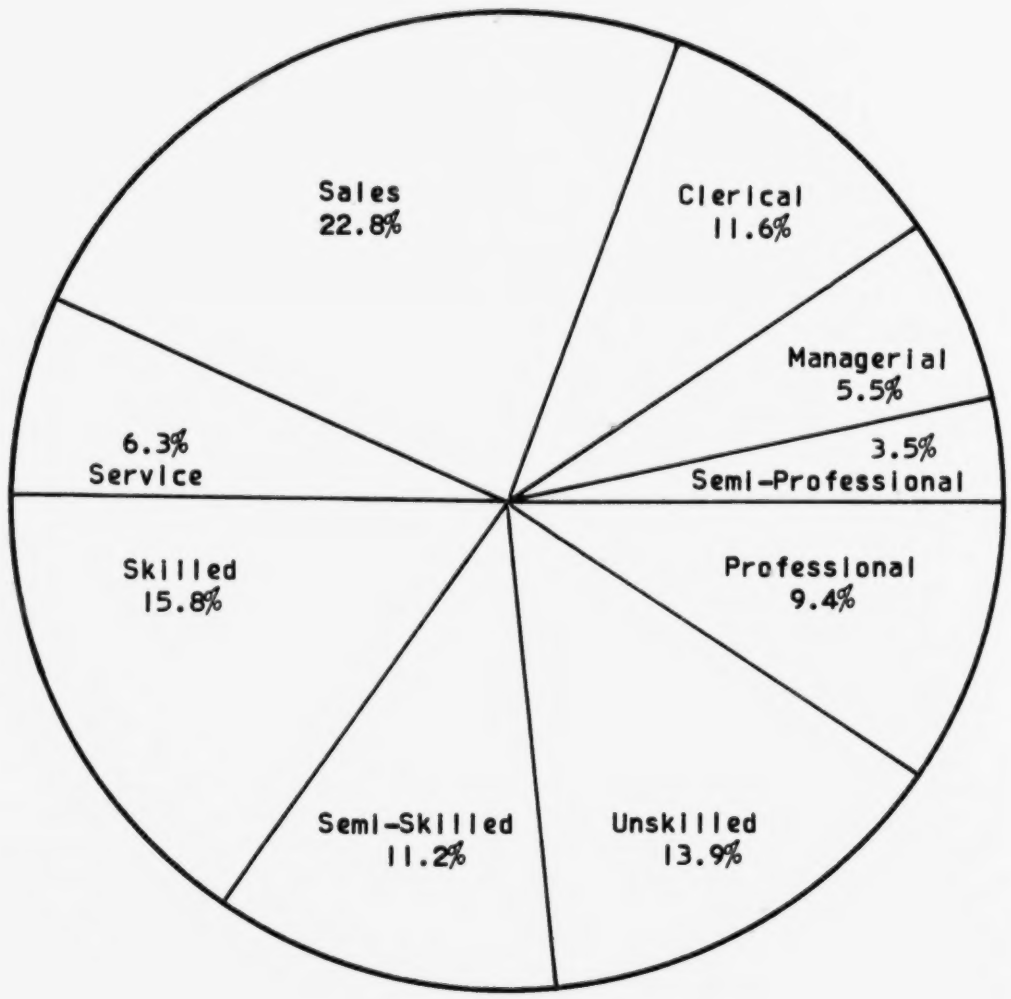
NAME:

FIRM:

NUMBER OF EMPLOYEES:

Indicate nature of your firm's business:

DATE:



DISTRIBUTION OF JOB CLASSIFICATIONS
FOR 2269 PERSONNEL NEEDS AMONG MEMPHIS INDUSTRIES

TABLE I

TOTAL NUMBER OF FIRMS REPLYING AND TOTAL NUMBER OF FIRMS IN THE SAMPLE BY SIZE OF WORK FORCE

Size Classification	A	B	C	D	Total
QUESTIONNAIRE DATA					
Number of Firms Replying	179	64	29	16	288
Number of Employees Represented	3510	6880	9023	26803	46216
Distribution as % of Total Employed	7.6	14.9	19.5	58.0	100.0
SELECTED SAMPLE DATA					
Number of Firms Selected	5	6	9	11	31
Number of Employees Represented	65	483	2516	21258	24322
Distribution as % of Total Employees in the Class	1.9	7.0	27.9	79.3	52.6

TABLE II

PERSONNEL NEEDS OF FIRMS REPLYING; TOTAL NEED AND CURRENT NEED
BY JOB CLASSIFICATION AND SIZE OF FIRM

Size Classification	A		B		C		D		Total	
Number of Firms Replying	179		64		29		16		288	
	Total	Current	Total	Current	Total	Current	Total	Current	Total	Current
Professional	74	27	42	10	15	7	83	71	214	115
Semi-Professional	32	13	11	8	10	3	26	11	79	35
Managerial	23	8	25	9	43	29	34	30	125	76
Clerical	89	27	93	35	42	15	40	0	264	77
Sales	206	106	93	53	38	21	179	143	516	323
Service	52	29	51	25	37	20	2	0	142	74
Skilled	88	55	81	56	75	47	115	106	359	264
Semi-Skilled	68	30	79	31	75	57	32	11	254	129
Un-Skilled	25	3	106	57	27	15	58	30	316	105
TOTAL	657	298	581	284	362	214	569	402	2269	1198

TABLE III

ANALYSIS OF MANPOWER NEEDS AS PERCENT OF SAMPLE FIRMS IN EACH CLASS EXPRESSING SPECIFIED REASONS FOR NEED

	A	B	C	D
Employment Needs Related to Growth 0-12 mos.	20.0%	56.8%	88.8%	90.0%
Employment Needs Related to Growth 1-10 yrs.	20.0%	71.0%	88.8%	54.0%
Employment Needs Related to Retirement 0-12 mos.	0.0%	14.2%	22.2%	18.0%
Employment Needs Related to Retirement 1-10 yrs.	0.0%	42.6%	22.2%	54.0%
Employment Needs Related to Cyclical Variations	20.0%	28.4%	33.3%	27.0%
Employment Needs Related to Loss in Sales	40.0%	65.8%	77.7%	27.0%
Employment Needs Related to Turnover	20.0%	28.4%	77.7%	54.0%

TABLE IV

PERSONNEL RECRUITMENT METHODS BY SIZE CLASSIFICATION
OF FIRMS AS PERCENT OF FIRMS IN EACH CLASS

	A	B	C	D
Advertising in Memphis	60.0%	85.8%	100.0%	90.0%
Advertising Outside Memphis	20.0%	56.8%	55.5%	63.0%
Services of State Employment Office	40.0%	42.6%	100.0%	81.0%

TABLE V

JOB SPECIFICATIONS - MINIMUM EDUCATIONAL PREFERENCE
AS A PERCENTAGE OF FIRMS IN EACH SIZE CLASS

	A	B	C	D	Total
Academic Education					
Elementary	0	0	44.4	0	12.9
High School	60.0	83.3	33.3	54.5	54.8
College					
Two Years	0	0	0	18.2	6.4
Bachelor Degree	20.0	16.7	22.2	9.1	16.1
Graduate	20.0	0	0	18.2	9.7
Occupational Training					
Vocational	0	16.7	77.7	45.0	41.9
Distributive Ed. and Non-Credit	20.0	50.0	33.3	72.0	38.8
Employer Training On-The-Job (After employment)	80.0	100.0	77.7	90.0	90.3

TABLE VI

LIST OF SAMPLE FIRMS IN STUDY

Size A Class 1-50 Employees
- E. O. Bailey and Company
- Cashier Training Institute
- The Daily News
- Gardner and Howe
- The Personnel Center

Size B Class 51-199 Employees
- Addressograph-Multigraph
- Ellers and Reaves
- Federal Reserve Bank
- New York Life
- Road Builders Equipment Company
- Rockwell Standard (Lyon Division)

Size C Class 200-499 Employees
- Dobbs House
- Hogue and Knott
- The Holiday Press
- Light and Power Utilities Corporation
- Malone and Hyde
- Memphis House Cleaning Company
- Sheraton-Peabody Hotel
- Shulton, Incorporated
- Southern Central

Size D Class 500 or more Employees
- Baptist Memorial Hospital
- Continental Baking Company
- Dover Corporation
- Field Enterprises Educational Corporation
- Firestone
- First National Bank
- Humko Products
- International Harvester
- Radio Corporation of America
- Shelby County
- Southern Bell

PROBLEM SESSION

VOCATIONAL-TECHNICAL EDUCATION, THE SEMI-PROFESSIONAL AND MASS LABOR AND SEASONAL LABOR NEEDS

Two seminar groups were combined to discuss the problems arising out of the topics of vocational-technical education and mass labor needs. This seminar proved to be the most popular topic of the conference day as judged by the number of participants selecting the topic. Discussion leaders for the vocational-technical aspects were Milton Phillips of Memphis State University and W. A. McGinnis of the Memphis City Schools. Discussion for mass labor needs was led by Dr. Wayne Newkirk of Memphis State University and L. B. Dow, Jr., of the Tennessee Employment Security office.

Mr. McGinnis reported that the Memphis City Schools, through Mr. McGinnis, has been participating in a series of national conferences studying the problems facing occupational, vocational and technical education. A recent report has been made available of the Summer Study at Massachusetts Institute of Technology and immediately following the Educational Assessment - Memphis conference another was to be held in Milwaukee in which Mr. McGinnis would participate. Memphis City Schools also has joined the Research Council of the Great Cities Programs for School Improvement. This organization has held two conferences on this subject quite recently.

Experience has shown a great amount of apathy on the part of parents, students, and industry concerning vocational and technical education. To illustrate, the example set by the Memphis Schools is used. A student entering the 8th grade must enroll in art, music, home economics or industrial arts, general science and physical education in addition to regular academic subjects. Beyond the 8th grade the course of study is optional with the pupil. Industrial arts is offered (not required) as follows:

9th grade–½ year woodshop, ½ year drafting
10th grade–½ year metal shop, ½ year electricity

After the tenth year, he may elect to continue industrial arts and continue for one or two years in the same offerings, or he may elect vocational courses. If the vocational course the pupil selects is not offered at the school he is attending, transfer to another school is permitted. Of the more than 10,000 boys in the senior high school, less than 8% elect a vocational program. Of the 21,785 boys enrolled in grades 8 through 12, only 9,610 are enrolled in either industrial arts or vocational subjects.

There are 20 occupational subjects offered at the high school to include vocational office practices, mechanical subjects, vocationally oriented sciences, and various trade subjects. In addition to this, 15 course offerings are available to adults following a similar pattern of occupations.

The reasons for the small number of pupils electing occupational subjects is not known but opinions expressed indicate students hear of the need for college preparation. The student feels he is doomed to failure if he does not plan for a college education.

Whenever a representative of an industry is asked to speak to a high school group the talk is usually directed to the superior student who is probably college bound. Ironically, the representative is frequently from an industry that employs very few college graduates. The speaker usually tells the students to get a "well-rounded" education and not to specialize in any one because the industry will train each in the skills essential to the employment. This advice is primarily for the production worker only and does not apply to the skilled worker such as office employees, key-punch operators, machinists, welders, plumbers and electricians.

Another problem facing the high school graduate is the child labor law. The law does not permit a youth to operate machinery prior to age 18 but many pupils graduate from high school prior to the age 18. Most of the employers of men do not wish to employ persons who have not completed military obligations and are thus eligible for the draft which could interrupt the employment service.

Finally, a problem in communication exists. The schools are faced with the problem of letting industry know what the schools have available to train and educate the youth for useful occupations. It is doubtful that participants in the conference today are aware of the educational facilities available within the community. The schools need help in solving this problem in communications.

The problem of unemployment levels was a topic for continued discussion. The unemployment level in Memphis is rated at 2.7% with prospects of dropping to 2.5% in the near future. Leading labor economists contend that an unemployment level of 2.5% is actually full employment. The level of 2.7% in Memphis means approximately 8,000 persons are unemployed but that many of these persons are in the group that would rather not work rather than accept a wage of $1.25 per hour or some similar level of pay.

The national labor market today is listed at 3.7% unemployed having dropped from a 4.5% in 1964. Of significance in this figure is the trend today for a shorter work week thus creating more jobs for the total work force. The needs of Federal government and the military forces total 1.3 million. The government is able to absorb some of the unemployables in its ranks. The Federal needs are also being benefited by the migration from agricultural pursuits to the industrial, particularly in the southern states. This trend is expected to continue. An important source of labor is in the female sex. The trend toward the employment of women has been very pronounced within the last 18 years. The youth of the nation are also contributing to the increased labor force.

The role of the older worker was a subject for concern. Retirement is coming at an earlier age at the present time. Many business mergers result in the displacement of older employees. The Employment Security Office contends that age should be no barrier to employment if the person is capable of performing the tasks required. In reality, however, employers are reluctant to hire the older worker if youthful workers are available. One participant indicated her firm was in a position to employ older persons, especially on a part-time basis. The Employment Security Office was commended for its efforts in providing aid in this endeavor.

Our measures of unemployment, locally and nationally, are at best "guesstimates." These measures define some of the criteria of people in the labor force. The problem in the South is mismatching, not unemployment. In the South, the most important resource is human. Capital employment has advanced tremendously in the last few years, but the quality of the labor force has not kept pace. We say that 2.5% unemployment is full employment. Here in Memphis we are at 2.7% and as we approach 2.5% we get to the unemployable.

For the past two years the United States has enjoyed an unprecedented period of economic growth. This expansion is caused somewhat by the labor shortage. The increased demand for labor has caused an increase in the average work week in the last 18 months. The source of increase is the demand for labor. Capital goods and defense industries both exceed the national average growth rate. The construction industry is declining because of the "tight-money" situation. All branches of the government have been demanding more people. To meet these needs we have had to dip into the pool of the unemployable. The transfer from agriculture to industry has taken up some of the slack. This trend should continue for the next four or five years. Over-time work is another increase in the source of supply. Women are the most important source of supply now, along with teen-agers.

The Tennessee Department of Employment Security, an arm of United States Employment Security, is primarily concerned with job placement. The United States Employment Security creates no jobs, does no hiring, conducts no training facilities. Its sole purpose is to bring the best qualified applicant to the attention of the prospective employer. This is accomplished through a complex and

professional process of screening, interviewing, counseling and test selection, which this year alone will place approximately 10,000 individuals in jobs in the Memphis Metro area. Jobs that, as closely as can be determined, are commensurate with the skills, ability, and aptitudes of the applicant and the requirements of the employer.

In 1964 our Memphis Metro area had an estimated population of 750,000. At this time approximately 221,000 non agricultural workers were employed. In 1965 our area had an estimated population of 770,000, a gain of some 20,000 and non-agricultural and salaried workers increased to 227,000, a gain of some 6,000. By October of 1966 our Memphis Metro population had increased to an estimated 803,000, a gain of 30,000 from the previous year. Employment in this period jumped to 239,000, an all-time high.

In the last several decades our local economy has moved steadily and surely from agrarian to industrial. No longer are our economic fortunes directly tied to, or dependent upon, the fortunes of the farmers' crops. With the steadily diminishing demands for rural labor has come an influx of displaced workers into our Metro area seeking a livelihood in an economy in which many of them cannot compete due to lack of skills, inadequate educational background, and a general lack of knowledge as to what is required to obtain and to hold a job in a fast-moving, complex and urban economy.

It is interesting to note that in recent years the increase in manufacturing employment has outstripped all other classifications in the labor market. Between 1964 and 1966 non-manufacturing employment increased by 5.4% in this area. During the same period manufacturing employment increased by a whopping 16.1%. This spotlights the transformation of our economy.

Despite rising employment (which is now at an all time high), and declining unemployment (which is the lowest it has been in 21 years), there is a growing problem of finding qualified workers to meet employer demands. The challenges to be met are more sharply defined than ever before. "Thinking small" about the use of our human resources will result in a deplorable waste of manpower potential. We must recognize that what we call a labor shortage is, in fact, a mismatch between the kinds of workers available and the kinds of workers needed. It represents a failure, and a challenge, to develop our human resources to the point where the unemployed and the under-employed are capable of meeting the requirements of today's jobs.

In this period of high economic activity in which those workers who lack training and education are finding it difficult to compete for the decreasing number of lesser-skilled jobs it will be necessary to develop new tools to meet this type problem. The work being done to educate, train and re-train, and help those workers who find it difficult to get jobs now in a period of full employment will pay lasting dividends to the individuals served and the community as a whole.

As long as our employers seek skilled and experienced workers, while thousands cannot find work because they lack proper education and training; as long as factories in our area are unable to fill orders because they lack competent workers; as long as thousands of teen-agers and other thousands of so-called "older workers" cannot find employment; as long as idle human hands need assistance in solving their employment problems, our work is not and and shall not be finished.

The Employment Security Office provides an additional service to school pupils by providing counselors who visit schools to administer occupational aptitude tests and thereby counsel pupils in occupational pursuits.

It was noted that pupils do not avail themselves of the opportunity to learn vocational skills to the extent made available within the schools. Approximately 1,500 class vacancies exist among the vocational classes for current offerings. It is the opinion of school authorities that parents tend to apply pressure to pupils to pursue a "college-bound" course of study in high school to the neglect of vocational training. The opinion was also expressed that industry must attract some people to jobs available because all youth cannot be absorbed by Federal programs such as the Peace Corps, the military or other Federally-involved programs for occupations. In contrast to this statement, some Negro youths drop

out of school to accept jobs prior to school graduation feeling they would not have an opportunity to improve their chances for a better job even if they graduated from high school.

Trade unions apparently do not encourage many young people to serve an apprenticeship in a trade. Many who do embark on an apprenticeship's training program do not complete the training program offered. There is a need for educational-industrial programs in the high school to advise pupils of their potential in the labor market and pupils should not be left ignorant of job opportunities. Vocational counselors are inadequate in number to provide the guidance services essential to the success of existing programs. Guidance given pupils is too frequently a comparison of vocational trades to a life in a profession and the resultant choice made by the pupil is self-evident.

A final thought: high school teachers and guidance counselors must be educated to realize that all high school pupils are not college material. Pupils should be counseled for attacking vocational problems from a level of intelligence and reality rather than to wander aimlessly without specific occupational objectives in mind by the time they complete high school.

NEEDS FOR THE LIBERAL ARTS EDUCATION

The discussion leaders for this seminar were Brother Luke Grande, President of Christian Brothers College and Dr. Frederick Pultz, Director of Guidance, Southwestern at Memphis.

The opening remarks for this seminar were from materials and data prepared in advance to the one-day session. A discussion followed the presentation.

The *Journal of College Placement* for April-May, 1966, reported a survey of 1959-60 liberal arts graduates were accepting job offers of $430 per month. Memphis employers were offering an average salary of $409 per month, or 5.9% less than the average salaries offered elsewhere. Liberal arts graduates will have to be offered realistic and competitive salaries if they are to be retained in the Memphis area. Generally speaking, salaries for college graduates are lower in Memphis than elsewhere. In 1965, the College Placement Council reported an average of $570; *Trends in Employment of College and University Graduates in Business and Industry* reported $550; and the Midwest College Placement Association reflected $563. These averages can be projected to the current day with an increment of $25-30 annually. The council on Opportunities states that selling insurance is paying $550-650 monthly and the industry will be seeking 12,369 recruits next year. This is an increase of 5% over the previous year. One-half of these companies will get 50-100% of their recruits by on-campus recruiting while 12% of these companies anticipate 100% recruiting on the college campus.

Dr. Jacques Barzun, Dean of Faculties and Provost at Columbia University, says: "Nowadays the only true believers in the liberal arts tradition are the men of business. They really prefer general intelligence, literacy, and adaptability. They know, in the first place, that the conditions of their work change so rapidly that no college courses can prepare for it. And they also know how

often men in mid-career suddenly feel that their work is not enough to sustain their spirits."

In the field of education, the transition to a future professional commitment can be made more effectively if the student has been initially exposed to liberal arts and their beneficent influence. This exposure results not only in mental fitness and broad awareness, but also provides adaptability and the basis for future growth.

It might be said that there has been a veritable trend towards the liberal arts as a prerequisite for the professions.

In 1961 the University of Pittsburgh dissolved its undergraduate college of business administration. Why? It wanted to discourage students from specializing in business until they launched into their graduate program. There B.A. or B.S. degree would be awarded after the completion of a four-year liberal arts program. Then they could specialize in business.

A *New York Times* item of December 19, 1964, stated that even the U. S. Military Academy curriculum reflects new interest in humanities. In one of its reports, the U. S. Government's Committee on Economic Development advised those planning to attend graduate schools of business that "they are better off taking their under-graduate work in non-specialized liberal arts."

As final reinforcement for the points made thus far, it is significant to note the November 21, 1964 issue of *Business Week*, which carried the results of a survey conducted among the 200 men who hold the two top posts in the nation's 100 largest corporations: "In today's top echelon of business, degrees also tend to be less specialized. In the 1955 group were 41 bachelor of arts degrees out of 71."

"Men are men before they are lawyers or physicians or manufacturers; and if you make them capable and sensible men, they will make themselves capable and sensible lawyers, physicians or manufacturers." These words, expressed by John Stuart Mill many years ago, stipulate a clear duality in man's education–the essence of education and the nature of man's professional commitment, with priority obviously being given to the former.

Cardinal Newman pointed out that "...general culture of the mind is the best aid to professional and scientific study, and educated men can do what illiterate cannot; and the man who has learned to think and to reason and to compare and to discriminate and to analyze, who has refined his taste, and formed his judgment, and sharpened his mental vision, will not at once be a lawyer, or a pleader, or an orator, or a statesman, or a physician, or a good landlord, or a man of business, or a soldier, or an engineer, or a chemist, or a geologist, or an antiquarian, but he will be placed in that state of intellect in which he can take up any one of these sciences or callings, or any other for which he has a taste or special talent, with an ease, a grace, a versatility, and a success, to which another is a stranger."

The young liberal arts student offers mental fitness and a broad awareness. He will be hired because of these assets, not because of any professional speciality, which he obviously lacks.

Most large organizations have their own in-training programs and have specifically assumed the responsibility for providing the practical experience which is missing in the undergraduate liberal arts program. Moreover, there seems to be a considerable sentiment to the effect that this is as it should be.

Almost all employers want persons with a well-rounded education–those who have not only excelled in school, but who have participated in extra-curricular activities and have displayed initiative and responsibility. Specific training is of distinctly secondary importance. One governmental organization expressed it this way: "We look for bright people even though they are not fully trained." A corporation personnel manager summed up such current emphasis very well: "If you will educate them, we will train them."

The discussion led off with the question: "What can liberal arts give to the business community?" Liberal education can be the answer to many fields in the business community. A survey conducted by Memphis State University indicates there is a need for pre-trained employees. Many business firms are employ-

ing the liberal arts graduates. Christian Brothers College liberal arts students have been employed by such firms as E. L. Bruce Company, Christian Brothers College and High School, Bishop Byrne High School, Fred P. Gattas Company, Humble Oil Company, Smith-Corona-Marchant, Humko, IBM, Memphis Publishing Company, National Bank of Commerce, and Prudential Life Insurance Company–to name a few.

Additionally, according to the 1967 *College Placement Annual*, there are 375 companies asking for liberal arts graduates to include Smith, Kline and French; Proctor and Gambel, W. T. Grant, Amstead Industries, Carnation Company, Xerox, J. C. Penney, Armco Steel, and the National Security Agency. These firms are seeking employees for promotion writers, administration, store managers, sales, personnel services, advertising, job training, marketing, market development, analytical studies, computer programming, and languages.

A sampling of occupational opportunities reported in the *Journal of College Placement*, April-May, 1966, reveals the following job classifications to be in demand:

Job Placement
Personnel
Administration
Occupational Information
Sales
Insurance
Promotion Writer
Store Manager
Marketing Development
Advertising
Analytical Studies
Languages
Computer Programming
Civil Service
Police Department
Law
Government
Reporter
City Planner
Reading Counselor
Service Consultant
Public Relations
Teacher
Librarian
Copywriter
Social Worker
News Editor
Recreation Leader
Museum Aide
Financial Analyst
Continuity Writer
Armed Services Officer
Research

Similar reportings are made by *Federal Careers for College Graduates; Opportunities for Careers in Government, 1965;* and, *Beginning Professional Careers with New York State.*

Dr. Pultz reported, however, that many liberal arts students do not want business opportunities but prefer to enter graduate schools to extend their educational experience. Unfortunately, many of the local business inquiries are primarily for the business-trained specialist as needed for specific jobs in accounting, marketing, or for similar positions. Many firms advertise for liberal arts graduates but actually interview only the business major.

The liberal arts education is a method of outlook and is not a specific course of studies. A high percentage of the graduates continue graduate programs of education either to delay going to work or to seek specialization. The Harvard School of Business accepts the liberal arts graduate without a concern for the background of education but shows preference for those who have had some business experience.

One-fourth of the engineering graduates of Christian Brothers College are now engaged in sales work with engineering firms. Sales personnel are needed or desired with technical training in the field of their sales. A justification may be cited for the liberal arts background to aid in a mobility of job opportunity. The highly specialized person may find it difficult to move from one area to another whereas the liberally educated person is able to accept opportunities from a wider range.

A distinct advantage for the liberal arts student is the concentration of education in the communication skills.

A fear was expressed that counselors of high school students, who are academically oriented, tend toward recommendations for college preparation.

ATTRACTING PROFESSIONAL ENGINEERING TALENTS

Discussion leaders for the seminar on attracting professional engineering talents were Brother Phillip Morgan and Brother Edmund Whaley of Christian Brothers College.

There is a shortage of positions in Memphis that offers a challenge to young engineers. A national survey of engineers conducted by A.S.E.E. reported that a primary concern for engineers is a job or position that represents a challenge to their professional competency. Memphis, on this criterion, is rated as a "wasteland for engineers." Most of the jobs available in Memphis are "handbook" engineering jobs that present no basic challenge to engineering talents. The salary offered to the young engineer is not an apparent problem because the salary offering is equal to or above the national average with the possible exception of civil engineers.

Engineering graduates who are not very confident of their technical engineering knowledge tend to prefer to enter industry through management phases having been attracted by the higher salaries which prevail. It is pointed out, however, that many of these people are not qualified for these positions.

In reply to the question of, "Is there a shortage of engineers?" one participant stated he could use 25 engineers but could locate none. The problem is compounded by the difficulty in attracting graduating engineers to an interview. Interview schedules are less than 50% of normal. It appears that many students prefer to remain in school rather than face the possible involvement in the Vietnam war through the draft. Deferments, under present conditions, are available to the student who remains in school.

The lack of qualified technicians who could serve as an aide to engineers is also a serious problem that must be faced. Many of the engineers in the work force are utilized in operational positions that could be filled by trained technicians if technicians were available. The release of the engineers assigned these tasks would provide professional engineers for the jobs remaining vacant.

The growth in the demand for professional engineers continues to exceed the growth in the supply of engineers.

THE MEDICAL ARTS PROBLEM

The discussion leader for this group was Robert F. Scates. Additional commentary was provided by Donald W. Crone, D.D.S., chairman of the Dental Education Committee of the Memphis Dental Society.

The hospital needs are for the professional and technically trained personnel. The unskilled worker (maids, janitors, and similar service personnel) pose no problem currently. The many causes for the increased needs of technical personnel in the medical field are characterized by expansion of knowledge and the growth patterns of our nation. Medical science has advanced rapidly thus increasing the need for technically trained supporting personnel. Our population is increasing with a greater proportion of the aged. Other social factors contributed to this problem. Income is increasing and health care is increasingly more available for all people rather than a privileged few. The Federal role in medicine and health care is ever expanding. Productivity expansion is necessarily slow in medicine because medical service is on a basis of people serving people. The extended health care as provided by nursing homes, home care, and the advances made in mental health drain the resources of personnel once available to the hospital centers.

The personnel needed currently include nurses, practical nurses, nurses aides, orderlies, medical technologists, physical and occupational therapists, engineers, mechanics and carpenters. The local need, especially for nurses, is not restricted to the Memphis area; the shortage is nationwide. Vocational

schools provide the training for some of the "aides" categories but not in sufficient quantities. Some of the skilled personnel needed are also needed by other institutions, other than hospitals.

The need exists for a broader base for educating the personnel needed. Community educational facilities are needed to lighten the load of the hospital institutions for providing education. Hospitals are currently educating 80% of the nurses now in training. Community interest is essential to share the problems facing the medical institutions. Some of this can be accomplished through improvement in coordination and an improvement in communication. The hospitals stand ready to correlate present needs with future expansions.

Some training facilities are utilized at the present time. High School graduates can be prepared to assume some of the jobs that are open within a six-months period. Salaries are low for all hospital jobs causing the hospitals tremendous problems in recruitment. Each person trained for handling a routine task helps to relieve a more highly-trained technician from these chores. Many of the hospital training programs lead to an associate degree.

The problems facing the dental services are similar to those facing the medical institutions. The shortage of personnel is especially felt in the field of dental laboratory technicians. These technicians are the producers of gold castings, porcelain jackets, dentures, dental prosthesis, orthodontic appliances and such related items as prescribed by the doctor. Obviously, each item must be hand-crafted for each individual; mass production to increase efficiency is impossible. The major difficulty in recruitment for training is the reluctance upon the part of the potential recruit to devote time to an apprenticeship necessary to develop a high level of craftsmanship. There are no short cuts to attaining this artistry.

FINDING THE UNUSUAL TALENTS

The discussion for finding the unusual talent was led by Dan Whipple of Executive Services, Inc.

It is recognized that Memphis is in a low unemployment area with a record of 2.7% unemployed. It is also recognized, however, that many of the stated 2.7% are not employable, at least by standards acceptable to employers. In a community, such as Memphis, as industrial plants move into the community, more technical and skilled talents are needed by the new industries and are also required by the industries well-established in the area.

Memphis is sociologically moving from an agrarian community to an urban society and is experiencing some of the problems apertaining thereto. The evolutionary resultant change prescribes a need to consolidate efforts for solving the problems of employment and orderly growth.

The community is instrumental in the production and location of unusual talents by extending the levels of communication to all persons within the area who can shed light upon the problem solution. The vehicle of seminars devoted to the isolation of the problem with constructive efforts to find solutions in concert is but one means whereby progress can be made.

One question leads to another which may be an issue. "Is the real problem a matter of finding or of developing the personnel essential to success?" It is the opinion of this speaker that personnel can be found, that talents do exist to meet the present demands. The sources of these talents may lie in resident personnel who, through company policy, may otherwise be transferred to other communities. The person who is reluctant to leave Memphis may be encouraged to remain to accept a comparable position with another firm.

The topic discussants were mindful of the role played by educational institutions. A question posed concerned the point at which general education should be terminated and specialized education or training should assume the major place in the education of the individual. It appears that the student who exhibits

a good aptitude for a college education should be encouraged to pursue this form of education. Within the college, the student may continue vocational preparations by specializing in a given field of endeavor. A further concern for the discussants (which remained unanswered) is a matter when a decision is to be made for selecting the "college-bound" and who is to make the decision.

Assuming some students fail to meet college aptitude standards, the problem before society is what should be done for these "flunk-outs". (This is a term used in the discussion and the editors assume this was not intended in a literal sense).

The suggestion is offered for a thorough review of the non-college-bound student's profile of talents, abilities, and interests. Encouragement should be given to this student to develop a salable skill through appropriate education or training. The junior college is suggested as one institution which could offer a program desirable for this student. The entire enterprise is predicated upon a complete counselling or re-counselling program.

A means suggested for identifying talents worthy of culture was made by an illustration of the employment policy of a local bank. Teachers are employed as relief tellers during the summer school recess period. This provides the teacher with a background of real experience that is utilized during the school sessions to identify students reflecting a potential for successful bank employment and serves as a resource of information for counselling students for vocations. The parallel to other industrial institutions is obvious.

REMARKS MIDWAY

William Pollard

As a community we are trying to stay on top of the demands for adequately trained people to be provided by our various educational institutions. Those of you in the educational field are well aware of this, so this need for realization of a problem is directed to those of us in other elements of the community who perhaps do not appreciate the dilemma of trying to keep abreast of a problem before it overwhelms you. This calls for additional understanding and efficiency on our part.

Some of the comments that led to the seminar session we are conducting today were: "How can I get help with my problem?" and "Here is the solution source." We are merely trying to bring these two elements together.

To validate the problem just mentioned, it is reasonable to again consider statistics lifted from Dr. Newkirk's paper showing Memphis with an average level of unemployment on the order of 2.7 per cent and the average national unemployment rate being 3.9 per cent. The difference is 1.2 per cent which represents approximately 30 per cent lower level of unemployment in Memphis than on the national scene. This is in part what led us, or gave us impetus, to dig into the question we are dealing with as the area of our immediate concern.

We are not in any grave trouble because we know that our labor sources are not depleted. We are still busily trying to pull people from the welfare and unemployment rolls and place them on the payrolls—making taxpayers out of them instead of tax takers. This continues unabatedly and we realize that we have a large group we can work with in this direction.

As happy as we are with our high level of employment, it is important that we cope with the seeds of need that will be germinated. Therefore, we are trying to highlight this matter in as an efficient manner as we can.

At this point in our program, we wish to thank all of you who are participating in this seminar for your endeavors. We also wish to recognize Ralph Thomas and acknowledge the work he has done. He is the Chamber of Commerce staff man to whom this committee looks for all of its activities and he has been a great help.

THE ASCENDANT MAN

C. C. Humphreys

Because all of you are contributing to the achievement of an important goal, the improvement of the educational environment in Memphis and Shelby County, I should like to thank every person for his individual contribution. It is gratifying to know that both the business community and the educational community are concerned enough to take steps to come together and discuss needs and means to improve the product of our educational systems–the student–at every level and in every field. I should like to express special appreciation to Mr. Bill Mieher, President of the Memphis Area Chamber of Commerce, for the active part he has played in our joint efforts to assess the educational character of our area. For his cooperation, Mr. Bill Pollard, Chairman of the Educational Committee, also deserves our thanks. Mr. Don Thomsen, Area Coordinator for the Regional Laboratory of CEMREL, too, has performed services for which we all are grateful. And, finally, Ralph Thomas, Staff Representative of the Chamber of Commerce, has provided able assistance at many points in our efforts. I am very happy to be with this group today.

We are often asked to ponder man's losing competition with the machine. On the assembly lines he is being replaced by automatic machinery which is regulated and instructed by electronic controls. Not even the question of whether people will want it has been left entirely to personal judgment. The answer to the question has been ascertained by market surveys, insured by advertising and both, perhaps, were analyzed with the aid of an electronic computer–sometimes too ambitiously called an "electronic brain."

These visions of the triumph of the machine can be multiplied endlessly. We do not, however, take them quite seriously for we do not really believe that we are being replaced, and our instinct is sound. If there is a competition between man and machine, man is winning it–his position has not been so strong, for at least two centuries, as compared with the apparatus with which he works.

And the fact that this is the age of ascendant man–not triumphant machine–has practical consequences. If machines are the decisive implement, then the social arrangements by which we increase our physical plant and equipment will be of first importance. But if it is men that count, then our first concern must be with arrangements for conserving and developing personal talents. It will be these arrangements on which progress will depend. Should it happen, moreover, that for reasons of antiquated design our society does well in supplying itself with machines and poorly in providing itself with highly improved manpower, there will be cause for concern.

What is the evidence that men have been gaining on machines–that skill and intelligence have become more important in what we call economic progress than capital plant and equipment?

The forces behind the change in the relative position of man as compared with capital are not new. Some of them curiously enough, are those which, at first glance, seem to suggest the ascendancy of the machine.

The classical trinity of productive factors were land (including natural resources), labor (broadly defined to include both physical and intellectual effort), and capital. All production was seen as resulting from the combination of these factors in one form or another and in one proportion or another. Some economists have questioned whether there was much difference between land and capital goods–both support man's efforts to produce things, and many economists have insisted on adding as a fourth factor of production entrepreneurship or the human effort which was devoted to organizing and managing the other three factors. Subject to these modifications and a few quibbles, the classical delineation of

productive agents is still accepted and indeed, is deeply imbedded in economic thought.

All production requires all three (or all four) factors and in this sense all are equally vital. But the importance attached to the different factors has changed remarkably in the last one hundred and fifty years. At the beginning of the last century–the formative years of modern economics–land seemed peculiarly important. Population was growing. Europe and Asia seemed very crowded. The vast fertile spaces of the Americas, Australia and Africa were but slightly appreciated.

The effect of modern agricultural techniques on production per acre was, of course, beyond view. Both Ricardo and Malthus, two of the towering figures in the history of economic ideas, concluded that, in different ways, men's fate would be largely decided by the relentless pressure of population on limited land. Labor being abundant, perhaps excessively so, it seemed far less important than land. Capital, though important, also lacked the life-and-death significance of the land supply. Land was the factor of greatest prestige.

As the nineteenth century passed, capital gained rapidly to a position of dominance in the trinity. The new world added enormously to the supply of land. The decisive question was new world development and for this ports, steamships, roads, railroads, farmsteads, and farm equipment were needed. The land was there; the labor came almost automatically; but the more capital the greater the pace of progress.

This emphasis on capital was reinforced by the nature of industrial advance during the last century. It consisted not of the invention of a great number of new techniques but the spread of a relatively small number of spectacularly important ones. Thus, textile manufacture became a factory industry. Steam power was applied to manufacturing, transport, and mining to replace power from men, animals, falling water, or wind. Iron and steel became plentiful and cheap and thus available for many new uses.

These inventions resulted, so far as anyone could tell, from a combination of accident, inspiration, and genius. Men like James Watt, Benjamin Franklin, and Eli Whitney could not be cultivated, and while they might under some circumstances be protected by the patent office, that was about all that could be done to foster technological progress.

But if little could be done to stimulate inventions, much could be done about putting them to use. Savings could be stimulated by exhortations to thrift–and even more by a system of ethics and religion which assured the diligent, abstemious, and self-denying man esteem in this world. Investment could be encouraged by stable government and laws which assured investors that profits would be theirs to enjoy. Looking rationally at the thing that was subject to wise policy, economists came to measure progress by the proportion of the nation's income that, each year, was saved and invested.

Investment in physical capital is still a prime measure of progress, however, more and more progress is coming to depend on the quality rather than the quantity of the capital equipment in use and on the intelligence and skill of those who use it.

There are reasonably good data to rely on. Between the early seventies of the last century and the decade 1944-53, according to calculations made under the auspices of the National Bureau of Economic Research, the net output of the American economy increased by an average of 3.5 per cent a year. Less than half of this (1.7 per cent) is explained by increases in the supply of capital and labor. The rest was the result of improvements in capital equipment–technological advance–and improvements in the working force, including, of course, its leadership and direction. Recent studies reveal similar trends.

But both technological advance and improved skills and abilities are the product of personal development. Machines do not improve themselves; this is still the work of improved men. And most technological advance is now the result not of the accident of inspiration or genius, but of highly purposeful effort. Once we had to wait for the accidental appearance of Edisons and Wrights. Now through educational and organized effort in a laboratory or experimental shop we

get something approaching the same results from much more common clay.

It would be hard to exaggerate the stake man has in the maintenance of our pace in discovery. But it also remains imperative that we successfully transmit the wisdom of the past. Perhaps no one has dealt with greater originality or insight with man's intellectual capital and his stake in its maintenance than Waddington in his little volume, *The Ethical Animal*. At the risk of oversimplification, I would describe his thesis as being this: That man's evolution through intellectual growth has transformed man's life more in a few thousand years than all the physical mutations of a million years was able to do. He has not sprouted wings, but he flies. He has not redeveloped gills and fins, but he survives and moves at great speed under water. He has not grown a heavy fur coat nor modified his control on body temperature, but he prospers in every climatic zone. All these he has done as a consequence of stored intellectual capital. These achievements are based on the power of a cultivated and informed mind.

So it comes to this. We now get the large part of our economic growth not only from more capital investment, but from improvements in men and improvements brought about by highly improved men. And this process of technological advance has become fairly predictable. We get from men pretty much what we invest in them. So now in its turn, after land, after capital, labor–highly improved labor to be sure–has come to the center of the stage. Investment in personal development is therefore at least as useful as an index of progress as investment in physical capital. It could be more valuable.

Therefore, it might be said that formerly we had to accept our economic fate. Natural endowment, the location of natural resources, topography, geography, the natural arteries of commerce, the accident of inspired genius–these God-given elements of our progress once determined our fate much more than they do today. Today, the forces which affect our economic fortune are much more subtle and the scope for self-determination is much greater. If we recognize that fact, it will be through leadership as exhibited today in this meeting that we are able to change the course of our economic future, or at least to accelerate man's destiny related to his social, economic, and spiritual progress. What we are doing here today will contribute to a more successful community, and the greatness of our community will depend to a large extent on our ability to effect through action the production of our educational environment.

SOLUTION SESSION

COMMUNICATING WITH EDUCATORS

The discussion leader for this seminar was Dr. John Richardson, Dean, Graduate School, Memphis State University.

All of you know the story of the old farmer who struck his mule with a two-by-four. When he was asked why, he replied, "You can't do a thing with him until you get his attention, and that does it!"

Too often we may have been using this technique in our efforts to communicate with each other. We may often start our efforts to communicate from a position of frustration rather than from a position of seeking truth. Communication involves two-way action; it involves someone talking or writing on the one hand and someone listening or reading with comprehension on the other.

I heard of the preacher who asked his congregation what he had preached on the Sunday before—none knew. This, of course, indicated a lack of interest, a lack of involvement, and possibly a lack of concern. These people might have listened with comprehension at the time, but since they were not really concerned, they did not feel the need to take any action or even to remember the points of significance. This kind of talking often takes place. It sounds good, but nothing happens. In reality, no meaningful communication really occurred.

Have you ever been associated with someone who carried on a conversation with you from the mouth only? He had his mind on whom else he needed to charm in order to promote himself. I heard of someone who tested such a character who asked him how his family was doing, by replying that his wife had deserted him and his oldest son was in fine health but in the local jail. His friend replied, "That's fine, Joe, I'm glad things are so well. Call me when you are in my city." He never really heard what the man said to him, for he was too busy thinking of himself. Often when groups such as ours try to talk, the participants are so busy promoting their own objectives that they never understand the other parties' problems or concerns.

These are some examples of why we do not communicate. It is possible that the educator starts talking to the business man about the need for more money and the business man closes his mind, because he is unalterably opposed to raising taxes anywhere along the line. On the other hand, the business man starts talking to the educator by asking a question such as, "Why don't you institute a program in driver education?" Both approaches are wrong if the two parties are to communicate.

The educator should have made his communication approach on the basis of an educational program and the needs of children. The business man should have started with the question, "How are the schools attempting to deal with the problem of driver educational safety?" I'm sure the difference in approach is obvious to you.

The problem of good communication is sometimes compounded by isolated incidents. As an illustration, a business group or an education group invites a speaker who enjoys reputation largely upon his ability to get newspaper space by his sensationalism and irresponsible random charges aimed at education or business. His comments may be based on no research and have no basis in fact, but this sort of thing drives wedges which lead to divisions which hamper, rather than help, communication and cooperation in community development and welfare.

The problem of communication is also compounded by newspaper controversies where a third party serves as an interpreter, in effect, because he calls one side and says, "Someone said thus and so about your pet project. Now, what do you say to that?" Engaging in this kind of public controversy does no good. Face-to-face conferences may not lead to agreement, but they do much more for clarification.

GENERAL EDUCATION—THE HIGH SCHOOL GRADUATE

The discussion seminar for the characteristics of the high school graduate as a product of the general education curriculum was led by William T. Conn, Supervisor for the Memphis City Schools, and Dr. James Colmey, Memphis State University.

This spring, if all are successful 6,367 high school seniors will graduate from the 21 senior high schools in the Memphis City School System, each of these graduating seniors will have had four years of English, one year of American History, one year of Mathematics, one year of Science, one year of Health and Physical Education and one and one-half years in Health and Physical Education or ROTC. In addition they must have had a major in a three-year subject, other than English and two minors in two-year subjects or the equivalent of these.

Units of credit which may be taken for graduation include such subject areas as Language Arts, Mathematics, Social Studies, Science, Business Education (Office Machines, Business Law, Bookkeeping, etc.), Art, Health and Physical Education, Industrial Arts, Vocational Education (Brick Masonary, Cosmetology, Welding, etc.) and Vocational Office Occupations.

A student especially interested in science and utilizing summer school might have studied one year of Life Science, one year of Earth Science, one year of Physical Science, three years of Biology, two years of Chemistry, one year of Physics and conducted independent research projects in the science area.

A student interested in math might have continued his studies through Calculus and Analytical Geometry.

Our system is among the 15 largest in the United States, having some 122,000 students in 127 school administrative units. Some 7,000 employees, including administration, teachers, librarians, and all related services, staff the 94 elementary, 38 junior high and 21 senior high schools. In a system of this size the individual needs of the student vary greatly. In an attempt to assist students at various capacity levels to discover and develop their individual abilities, several special projects have been incorporated into the overall program of instruction. The following were in operation during the 1965-66 school year.

Achievement Emphasis: This project, which has now been in operation for three years, made continued progress during the 1965-66 school year. This program is structured to help students in grades seven and eight who are underachievers in basic subject areas, such as reading, English, arithmetic and social studies.

Twenty four junior high schools participated in this project, with 1,082 students and 86 teachers involved.

Advanced Placement: The Memphis City School system is still a leader in Advanced Placement in the southern region. The workshops conducted throughout the south, and the system-wide approach to the Advanced Placement program has been called by leaders in this area as "The Memphis Plan."

The program was offered in six high schools, with a total of 253 students and 18 teachers participating in classes designed as accelerated courses for pupils identified with outstanding ability in individual subjects. Ratings by the schools participating were as follows: excellent (4), good (2), fair (0), poor (0). Four schools expressed a desire to continue the project, and one to expand it.

Superior-Talented Student Project: Memphis has received national mention and acclaim for implementing this program. During the 1965-66 school year *The Memphis Story* was published jointly by the Southern Association of Colleges and Schools and the North Central Association of Colleges and Secondary Schools. The Memphis system was also given a Pacemaker award by the National Educa-

tion Association and *Parade Magazine* at the NEA convention in New York last summer.

Twenty Memphis high schools had 2,047 students enrolled in this program with 120 teachers involved.

Modular Scheduling: The Memphis City Schools participated in a program of Modular Scheduling for the first time during 1965-66. Four schools offered modular scheduling with team teaching, small group instruction, and independent study techniques. Trezevant High School was the first school in the southern region to have a computer generated schedule that is referred to as "pure modular scheduling," involving 20-20 minute time patterns per day. The schedule repeats itself every five days. The flexibility of curriculum and the utilization of time related to curriculum have been outstanding, based on all of the reports from principal, faculty and the community.

University of Illinois Committee on School Mathematics: Two junior high schools, 200 students, four teachers, and several staff members have been involved in the UICSM project under the direction of Dr. Max Beberman at the University of Illinois. Reports indicate that this project has been successful, and it will be expanded during the 1966-67 school year based on a satisfactory experience in these two centers.

Mathematics Curriculum Upgrading: Two high schools with 90 students have moved First Year Algebra into the 8th grade. The purpose of this program has been to upgrade the curriculum so students with outstanding mathematical ability will be free to take Calculus (College Board Program) for Advanced Placement credit during their senior years.

School to School Project in Guatemala, (Central America): In the spring of 1966, plans were approved for the *Pairing of the Memphis City School System with the American School in Guatemala*, a project sponsored by the Overseas Schools, U.S. Department of State. The two systems will exchange ideas, materials, equipment, teachers and administrative staff members and possibly students. Visits are being made by personnel of both systems to evaluate and project specific plans for a long-range program of exchange through 1967.

All of these programs have been conducted during the regular school year. Our summer school has also received attention. Some of the special courses include computer-related mathematics, FLES (Foreign Language-Elementary School) and Field Biology. This past summer our program expanded greatly. One approach was a tuition summer school including new work or make-up. Some examples of enrollment figures are as follows:

Elementary (1-6)	605
Junior High (7-8)	567
Senior High (9-12)	2,049
Total Grades (1-12)	3,221

A new program came about under Public Law 89-19, Project 66-09, Title I, which was known as our Non-Tuition Summer School.

Enrollment figures - Elementary	2,743
Secondary	2,824
	5,567
Enrichment Program (no credit)	1,229
Total	6,796

Summer school then is becoming a major part of our overall program.

This project provided excellent opportunities and services for the students enrolled.

Other Title I Projects now underway include:

Teacher Training in Improving Reading Skills
Elementary Guidance and Psychological Services
Kindergarten

Adult education is another area in which we are now greatly involved. At

present approximately 2,800 adults are enrolled in classes taught by some 178 teachers.

Taken as a whole this represents a very good system with many innovations being tested. Certainly a system of this size and with the varied activities mentioned has its problems. Communication for instance is a major problem. It is almost impossible for instance for all of the science teachers to meet together at one place during their in-service program. It is hard for a math teacher in one school to know about new ideas being tested in another school. Continual effort is needed to keep achievement levels high. At present we are making a complete study of our junior high school organization and curriculum in an effort to better meet the needs of every student.

But even a good school system can do only so much for a high school graduate. Many will go to college. Some will start looking for a job and be joined later by those who were unsuccessful as a college student. What can we do for these individuals that we are not now doing? Would a community Junior College help meet this need? And what about the individual who realizes too late that he did not take advantage of the education that was offered him? How can we meet his need of further training? I think that we have made a good beginning but this represents only one step down a very long road.

The parents of pupils contribute to some of the problems the schools must face, according to the participants in the discussion which followed the presentation by Mr. Conn. Parents help pupils feel there is a stigma placed upon any educational endeavor that does not lead to a college education. This same attitude is abetted by the high school guidance counsellor, who in the eyes of the discussants, is biased toward a liberal arts education. The counsellor fails to encourage high school students to undertake a non-college-preparatory program of studies, thus not recognizing the presence of a vocationally oriented course of studies.

High school graduates are accused of seeking college admission for the sake of social prestige or acceptance with no intent to pursue a vocational interest.

Encouragement was offered school personnel to provide more "experience" teaching such as problem solving situations for pupils rather than to follow the traditional "methods and techniques" approach to general education. The high school graduate must face responsibilities after leaving the school. Planning for this acceptance of responsibilities must be a part of the way a pupil is taught by providing the pupil the opportunity of exercising this duty through a practical application while still in school. The community, to include the business community, must discover a way in which interest and concern may be shared with school officials to provide for better opportunities for pupils. Educators are not able to create this atmosphere for better learning alone. Full cooperation for all must be the goal.

OPPORTUNITIES WITHIN THE PUBLIC SCHOOLS

The discussion leaders for the seminar session, Opportunities Within the Public Schools, were Lee Thompson, Assistant Superintendent, Memphis City Schools, and Arthur Rauscher, Assistant Superintendent, Shelby County Schools.

Knowledge is the primary factor in future economic and social status in America.

In a very real sense, schools assign a future to their pupils. Therefore, demands placed on teachers and administrators today are far beyond the functions of exclusively educational tasks. The fact that the Memphis City School System is regarded as one of the ten fastest growing public educational systems in the nation (it ranks 12th in pupil population) attests to the organization's awareness of the need for quality education in today's society.

The city system is "in step" with the latest changes and innovations in education and is a pace-setter in the nation in many areas.

Programs offered by the Memphis City Schools cover almost the entire life

span of Memphis area residents–ranging from pre-school years in Head Start and kindergarten to citizens over 60 enrolled in Adult Basic Education.

The Memphis City School System has operated a Head Start Program for the summers of 1965 and 1966. This Head Start Program enrolled approximately 5,000 children who were to enter the first grade in the fall following their summer Head Start experience.

The Memphis City School System cooperated with the State Department of Education in the establishment of two experimental kindergarten programs in the fall of 1965 and expanded the kindergarten offerings by adding 25 classes in the fall of 1966.

The school system initiated Achievement Emphasis classes at the elementary school level in the fall of 1965 and considerably expanded these offerings in the fall of 1966. These classes have limited enrollment and are designed to help the child who has greater potential than he is demonstrating. The school system is also initiating an ungraded primary structure in several of the elementary schools. The ungraded primary takes the place of former grades 1, 2, and 3, and allows the child to develop at his own rate of learning. Team teaching is being introduced into the elementary schools in an attempt to utilize the maximum abilities of the various teachers on the staff.

Three Psychological Services Centers have been established to serve elementary schools in the poverty areas. An additional center has been established to serve the elementary children in other schools. Present plans call for the enlargement of the Psychological Center and Guidance Counselor Staff to serve the elementary schools that are not eligible for poverty funds as provided by the Federal programs.

The Instructional Materials Center is growing rapidly and now provides over 6,000 16mm film prints for use by the teachers of the school system.

Instructional television is very much a part of the elementary program in Memphis. At the present time, classes are beamed to the schools in the fields of mathematics, science, music and art.

The Elementary School Library Program is being expanded and, at the present time, each elementary school is furnished with regular library service and librarians.

The elementary schools became affiliated with the Cooperative Program in Elementary Education with the Commission of Elementary Schools of the Southern Association of Colleges and Secondary Schools in the fall of 1966. The Southern Association is the regional accrediting association long known for activities among high schools.

The summer school of 1966 found 15,000 pupils enrolled in grades one through twelve.

All of the high schools in Memphis are accredited by the Southern Association of Colleges and Secondary Schools.

Achievement Emphasis classes are provided for students in grades 7 and 8 and are designed to serve the same purpose as set forth for elementary schools as noted above.

At the present time, a junior high school self-study project is underway in an attempt to provide the best means of transition from elementary school to junior high school.

Advanced Placement classes are available for students who are capable of doing college-level work while still in high school. It is possible for these students to take examinations and receive some college credit for course work taken in the Advanced Placement classes.

Superior Talented Student classes have been cited as an outstanding example in the nation of programs of this nature.

The Memphis City School System is constantly striving for improved ways of doing things and the Modular Scheduling Program at Trezevant High School is one example of this fact. Recently, representatives from 40 large city school systems spent two days at Trezevant High School to observe this program and to discuss the various aspects of team teaching. Modular scheduling is a means for scheduling pupils allowing for varying amounts of time for the different sub-

jects the pupil may choose. The complex schedule needed by the school is made possible through the use of a computer.

Two schools are working with the University of Illinois committee on school mathematics in the first year algebra project.

The Memphis School System is presently paired with the American School of Guatemala in a foreign exchange program including personnel, curriculum, and all of the other facets of school operation.

Each of the city high schools is equipped with modern science laboratories and the science curriculum is as broad as any of the comprehensive high schools in the nation. The foreign languages taught include French, Spanish, Russian, Chinese, and Latin. Each school has a language laboratory with modern electronic equipment designed to improve language teaching.

Art and music (vocal and instrumental) are offered at each of the secondary schools. The 1966 graduates of the Memphis City Schools were offered 1,034 scholarships.

More than 1,500 adults are enrolled in the Adult Basic Education Program in Memphis and Shelby County. The objective of this program is to raise the educational level of adults. Some students in this program are over 60 years of age.

The Special Education Program in the City School System is all-inclusive and includes classes for Perceptually Handicapped, Visually Handicapped, Speech Therapy, Emotionally Disturbed, Educable and Totally Mentally Retarded, Physically Handicapped, etc. The school system now has more than 170 classes in the Special Education field which makes the Memphis City School System the second largest in the South for special education programs.

The school system feels that education must respond to changes in the kinds of employment opportunities in Memphis. Vocational classes are offered at Tech High School, Booker T. Washington High School, the Memphis Area Vocational-Technical School and other high schools which have a need for these courses for the students. The courses include such fields as vocational business education, trade and industrial classes, health occupations (working with the Medical Center to supply nurses and medical technicians). The school system also assists business and industry in supervisory-training and apprentice-training. The school system has a keen interest in working with the business community of the city and stands willing to provide training in any field where the need is indicated.

The Memphis City School System is associated with CEMREL (Central Midwestern Regional Educational Laboratory). The City School System is also one of only 17 cities in the nation comprising the Great Cities Research Council. The interest in research is further typified by the planning for the Mid-South Regional Science Center.

The Memphis City School System is like any good business. We carry a good stock of merchandise (instructional programs) and can give good delivery on specific items (new instructional programs which have to be ordered).

The aims of the Shelby County elementary schools are to enable each child, within the realm of his ability, to gain a workable knowledge of the tool-subjects thereby enabling him to read with understanding, to speak and write with some degree of clarity, and to understand and use basic mathematical concepts. Additionally, each child is afforded the opportunity for sound mental and physical health and a chance to learn to live cooperatively with his fellow man. An aim of the elementary school program is to develop an appreciation for art and music.

Several means are employed for effecting the aims of the elementary school. Committees of teachers and other professional personnel continually revise the school curriculum ever mindful of the need to experiment with new developed curriculum guides or other prepared materials of teachers. Curriculum coordinators are employed in some schools to guide teachers into better teaching practices. Other professional personnel, available to the entire school system, direct curriculum development and research and direct the activities of specified programs such as physical education. A program is also provided for the academically talented.

At the high school level a wide variety of course selection is made

available to each student. In addition to the required four units of English; one unit each in mathematics, science, health and physical education, and American history, each graduate may choose eight electives so long as the pupil attains one major and two minors in academic subjects.

The electives offered at the high school include:

Languages
Latin
French
German
Spanish

Sciences
General Science
Earth Science
Biology
Chemistry
Physics

Social Studies
Civics
World Geography
World History
Government
Economics
Sociology

Other
Unified Geometry
Advanced Mathematics
Music
Art
Health
Physical Education
Driver Training
Philosophy (experimental)

Industrial Arts and Vocational
Agriculture
Home Economics
Typing
Shorthand
Clerical Office Practice
Auto Mechanics
Cosmetology
Distributive Education
Electricity
Mechanical Drawing
General Shop
Woodworking

Special attention is given to requests of industry and some honors courses are provided.

Shelby County attempts to attain a proper blend of intellectuality and practicality. The essential purpose of education in America is not to train workers but to educate its citizens. To this end, Shelby County Schools strive forward.

VOCATIONAL EDUCATION - HIGH SCHOOLS

BUSINESS EDUCATION

Douglass High School Advanced Typing & Office Machines, Office Related Skills (Clerical), Office Production (Clerical), Shorthand I	Advanced Typing, Shorthand & Transcription, Office Related Skills (Secretarial), Office Production (Secretarial)
Frayser High School Advanced Typing & Office Machines, Office Related Skills (Clerical), Office Production (Clerical), Shorthand I	Advanced Typing, Shorthand & Transcription, Office Related Skills (Secretarial), Office Production
Hamilton High School Advanced Typing & Office Machines, Office Related Skills (Clerical), Office Production (Clerical), Shorthand I	Advanced Typing, Shorthand & Transcription, Office Related Skills (Secretarial), Office Production (Secretarial)
Humes High School Advanced Typing & Office Machines, Office Related Skills (Clerical), Office Production, Shorthand I	Advanced Typing, Shorthand & Transcription, Office Related Skills (Secretarial), Office Production (Secretarial)

Manassas High School	
Advanced Typing & Office Machines, Office Related Skills (Clerical), Office Production (Clerical), Shorthand I	Advanced Typing, Shorthand & Transcription, Office Related Skills, (Secretarial), Office Production (Secretarial)
Memphis Technical High School	
Advanced Typing & Office Machines, Office Related Skills (Clerical), Office Production (Clerical), Shorthand I	Advanced Typing, Shorthand & Transcription, Office Related Skills (Secretarial), Office Production (Secretarial)
Treadwell High School	
Advanced Typing, Shorthand & Transcription, Office Related Skills (Secretarial)	Office Production (Secretarial), Shorthand I
Booker T. Washington High School	
Advanced Typing & Office Machines, Office Related Skills, (Clerical), Office Production (Clerical), Shorthand I	Advanced typing, Shorthand & Transcription, Office Related Skills (Secretarial), Office Production (Secretarial)
Westside High School	
Advanced Shorthand & Transcription, Office Related Skills, Shorthand I	Advanced Typing and Office Machines, Office Production
Carver High School	
Advanced Typing & Office Machines, Office Related Skills (Clerical), Office Production (Clerical), Shorthand I	Advanced Typing, Shorthand & Transcription, Office Related Skills (Secretarial), Office Production (Secretarial)
Kingsbury High School	
Advanced Typing & Office Machines, Office Related Skills (Clerical), Office Production (Clerical), Shorthand I	Advanced Typing, Shorthand & Transcription, Office Related Skills (Secretarial), Office Production (Secretarial)
Lester High School	
Advanced Typing, Shorthand & Transcription, Office Production (Secretarial)	Office Related Skills (Secretarial) Shorthand I
Melrose High School	
Advanced Typing & Office Machines, Office Related Skills (Clerical), Office Production (Clerical) Shorthand I	Advanced Typing, Shorthand & Transcription, Office Related Skills (Secretarial), Office Production (Secretarial)
Oakhaven High School	
Advanced Typing, Shorthand & Transcription, Office Production (Secretarial)	Office Related Skills (Secretarial) Shorthand I
Overton High School	
Advanced Typing, Shorthand & Transcription, Office Production (Secretarial)	Office Related Skills (Secretarial) Shorthand I

South Side High School
- Advanced Typing, Shorthand & Transcription, Office Production (Secretarial)
- Office Related Skills (Secretarial)
- Shorthand I

DISTRIBUTIVE EDUCATION

Frayser High School
Humes High School
Kingsbury High School
Tech High School
Oakhaven High School
Hamilton High School
Lester High School
South Side High School
Treadwell High School
Booker T. Washington
Westside High School
Douglass High School
Melrose High School
Carver High School

TECHNICAL EDUCATION

Tech High School
- Electronics
- Industrial Chemistry

TRADE & INDUSTRIAL EDUCATION

Central High School
- Radio

Douglass High School
- Cosmetology

Humes High School
- Cosmetology
- Electricity
- Printing

Tech High School
- Auto Mechanics
- Cosmetology
- Commercial Art
- Printing
- Radio and TV
- Machine Shop
- Welding
- Practical Nursing

Manassas High School
- Auto Mechanics
- Auto Body Repair & Refinishing
- Cosmetology
- Radio and TV

Booker T. Washington High School
- Auto Mechanics
- Bricl asonry
- Cosme ology
- Radio & TV
- Tailoring
- Electrical Appliance Repairs
- Plastering
- Printing
- Shoe Repair
- Wood Working

ADULT DAY PROGRAMS

TECHNICAL EDUCATION

Tech High School
- Data Processing

HOMEMAKING

Tech High School
- Millinery
- Sewing

MEMPHIS AREA VOCATIONAL-TECHNICAL SCHOOL

- Drafting
- Radio & TV
- Office Machine Repair
- Shorthand
- Bookkeeping
- Business English
- dding Machine
- Comptometer
- Calculator
- Auto Mechanics
- Small Gas Engines
- Refrigeration & Air Conditioning
- Typing
- Filing
- Office Machines
- Posting Machine
- Dictaphone

MDTA ADULT CLASSES (Manpower Development Training Act)

- Auto Body Repair
- Upholstery
- Woodworking
- Commercial Cooking
- Custodial Helper
- Marketing & Distribution

MDTA YOUTH TRAINING PROGRAM

- Machinist, Machine Operator
- Maid, General
- Welder Combination, Auto Service Station Mechanic

HEALTH OCCUPATION CLASSES

- Practical Nursing
- Laboratory Assistant
- Operating Room Technician
- Nursing Assistant
- Medical Records Technician

ADULT EVENING PROGRAMS

BUSINESS EDUCATION

Tech High School
- Bookkeeping
- Typing
- Shorthand (Int.)
- Business English
- Shorthand (Beginning)
- Shorthand (Adv.)

Booker T. Washington High School
- Typing
- Shorthand (Int.)
- Shorthand (Beg.)
- Shorthand (Adv.)

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DISTRIBUTIVE EDUCATION

Tech High School

Business English
Trans. and Traffic Management
Interstate Commerce Law & Practice

Booker T. Washington High School

Salesmanship

HOMEMAKING

Tech High School

Sewing
Millinery

Booker T. Washington High School

Sewing

TRADE & INDUSTRIAL EDUCATION EVENING CLASSES

Tech High School

Blueprint & Sketching
Painters
Sheet Metal
Supervisory Training
Basic Slide Rule
Drafting
Auto Mechanics
Speech
Heating & Air Cond.
Carpentry
Plumbing
Steamfitters
Welding
Radio & TV
Refrigeration & Air Conditioning
Refrigeration Theory
Basic Social Science
Steam Theory

Booker T. Washington High School

Tailoring
Child Care
Roofer Apprentice
Radio & TV
Refrigeration & Air Conditioning
Cosmetology

TECHNICAL

Tech High School

Punched Card Machine–Data Processing
Basic Electronics
Advanced Electronics
Intermediate Electronics

EVENING CLASSES MEMPHIS AREA VOCATIONAL-TECHNICAL SCHOOL

Shorthand
Typing
Business English
Drafting
Upholstery
Adding Machines
Comptometer
Calculators
Basic Electricity
Welding
Auto Mechanics
Radio & TV
Auto Body Repair
Refrigeration & Air Conditioning
Posting Machines
Dictaphone
Supervisory Training
Small Gas Engines

THE EXPANDING ROLE OF THE STATE UNIVERSITIES

The discussion leaders for the expanding role of the state universities were Dr. C. C. Humphreys, President; Dr. Ronald Carrier, Provost; and Dr. John Richardson, Dean of the Graduate School, Memphis State University.

The state university, as an institution, is expanding not only as it grows in pupil enrollment but is expanding in the role it plays in modern society. The pupils that apply for admission are more competitive than they have been in years past. Historically the university has been the place for continuing education for a select few in a few select areas of endeavor. The student of today and the educational needs of today are no longer restricted to the historically traditional law, medicine, the clergy, and teaching. The cultural and educational needs of the community have increased for avocational and vocational pursuits. There is developing a continuing demand upon the citizens of the communi ty to re-educate themselves. It has been estimated that each person must re-educate himself at least three times within his lifetime.

To meet the demands placed upon the state university, there is a need for a comprehensive graduate program leading to a doctoral degree. This community is probably the only community of its size in the United States that can not offer a comprehensive graduate program at the doctoral level. The community is losing human resources as a result of this dearth of facilities.

The level of sophistication of the pupils and the spirit of competition exhibited by the entering pupils creates a tremendous demand upon the university faculties and upon the educational facilities.

The university is expanding in areas of new programs and in the re-vitalization of existing programs to meet the pressure of the great amount of new knowledge becoming available daily. These new discoveries are in scientific knowledge, economic knowledge and theory, behavorial sciences, managerial skills, and in many other fields of knowledge. New machines produce new techniques for study which, in turn, flood the world with additional knowledge and new technologies.

There is an increasing awareness of and appreciation for the cultural attributes of our society. Increased salaries and family incomes have produced a more affluent society with leisure time and a desire to enjoy pictorial art and the performing arts. The university is expanding to succor these wants.

The new technologies have produced a new breed of vocations and have dictated an expansion in the educational aspirations of many to provide for the multitudinal levels of proficiencies expected of the labor force and to meet the desires and the demands of the abler student to better prepare himself in this complex world.

The competitive nature of the student prevails after graduation from college and the desire to compete in society continues. The student must be equipped to continue in the competitive life.

The role of the university is also realized through an impact upon the community. The role of the university as an impact upon the community, or as involvement with the community, has been a long, slow process with the trend having its earliest beginnings as a result of the Morrill Act of 1862. This act of Congress established the Land Grant Colleges and introduced agricultural education to the community. The results of this impact upon the community may be illustrated by the fact that 4.5% of our working force are now able to produce the farm products needed to feed and clothe the other 95.5%.

There is no known method for measuring the effects of university faculties and research efforts upon the community through governmental, civic and business research services. Commercial industries have discovered the university as a source of knowledge and human resources to aid in the solution of operational problems and to improve and perfect operational techniques.

The university has realized the new tradition is to design a program to meet the needs of the pupils in the community rather than to design for the pleasure of the faculty. The old concept of unemployment and pursuing an education as being compatible is giving way to the compatibility of pursuing an education while employed.

The opportunity for advanced graduate programs shall have an increasing impact upon the community as an attracting force for sophisticated industries and their concomitant personnel.

The increased interrelationships among the students, the university and the community increases the value of the pupil, the faculty and the community. Each facet stimulates the others.

THE SERVICE OF THE LIBERAL ARTS COLLEGE

The discussion leader for this seminar was Dr. Ray M. Allen, Dean of Admissions, Southwestern at Memphis.

The college of liberal arts and sciences serves democracy—the government of the people, by the people, and for the people—higher education, and even technology, mainly by stressing the importance of each individual's developing his maximum potentiality as a thinking, human being, and by encouraging those who excel in creative thinking to continue their self-education throughout a lifetime. Dr. Kenneth Keniston, Assistant Professor of Psychology at the Yale University Medical School, recently concluded an extensive survey and perspicacious evaluation of American higher education with the following comment:

> Perhaps our society's greatest long-range need is not for more skilled engineers, lawyers, scientists, and physicians, but for more whole and integrated men and women, who can bring educated minds to both personal and public life. Perhaps the university serves both society and its students best when it serves neither directly, but attempts to create a friendly culture for the growth of critical intelligence, the joining of reason and action, and that detachment from the daily pressures of society which has always characterized educated men.[1]

Many other thoughtful analysts of modern society have drawn similar conclusions. Dr. William C. De Vane, former Dean of Yale College, concurs, as follows:

> ... the colleges of the United States are educating today the young people who will be the decision-makers in national affairs tomorrow. It is important that the colleges prepare men and women at the appropriate stage to be excellent specialists ultimately as physicians, lawyers or scientists; but it is even more important that the specialists be deeply and broadly educated so that their decisions will be those of wise and knowledgeable people.[2]

To Dr. De Vane, this necessary duty of American colleges entails a thorough immersion of the student in the liberal tradition, whatever his speciality may later be.

Even Dr. Clark Kerr, until recently Chancellor of the state-controlled multiversity known as the University of California, longs for an "aristocracy of intellect" which justifies itself to a democracy of all men. "It was equality of opportunity, not equality *per se*, that animated the founding fathers and the progress of the American system", he reminds us, as also he bids us look to

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1 See Dr. Keniston's Essay, "The Faces in the Lecture Room" (p. 345) in The Contemporary University: USA (Boston: Houghton-Mifflin, 1966), ed. by Robert S. Morison.

2 See Dr. De Vane's essay "A Time and Place for Liberal Education" (p. 204) in Reflections on the Role of Liberal Education (Washington: Association of American Colleges, 1964), ed. by F. L. Wormald.

the twenty-first century university which will emerge from the "private universities which have prided themselves on control of their own destiny." "And perhaps", he concludes, "there will arise a more dynamic demonstration of how excellence makes democracy more vital and its survival more assured. Then the contemporary American university may indeed rise to the 'heights of the times'."[3]

Like others, Dr. Robert Hutchins, President of the Fund for the Republic, believes that knowledge has become our primary national resource, and that America could become the school of the world, as Athens was the school of Hellas. "We have the chance to make it possible for every American to develop his highest powers to the limit of which he is capable. We have the chance to make it possible for every American citizen to take part in the transformation of this country into a human society."[4] Also, in Dr. Hutchins' opinion, the possibility of this transformation lies in liberal education; the education that prepares man for a life of learning in a community of men learning together.

> The education that prepares for such a life in such a community is liberal education. It supplies the intellectual techniques and the intellectual framework necessary to a life of learning and a life in the political dialogue. It frees a man from the prisonhouse of his class, race, time, place, background, family, and even of his nation, for the purpose of understanding and taking part in the great task of becoming human and forming a world community.[5]

Southwestern at Memphis has always aimed at being the kind of liberal arts college that provides such a liberal education, an education best summarized in two words: "genuineness" and "excellence". So stated Dr. Charles E. Diehl, President of Southwestern from 1917 to 1948:

> Southwestern has always believed in a well-rounded education It has stood for a liberal education, one that releases the mind from ignorance, prejudice, partisanship; one that emancipates the will, stimulates the imagination, broadens the sympathies, deepens the sense of responsibility, and makes the student a citizen of the world. It has believed that the need of the country is for trained minds ... It seeks today even more intensively to develop the faculties of the student, to build the mind rather than to store it with special knowledge. To help students stand upon their own feet, to direct and stimulate them to think accurately and comprehensively, is not an easy task, but this should be the deliberate purpose of the liberal arts college. Southwestern endeavors to communicate intellectual enthusiasm to as many of its students as possible, to develop in them the capacity to appreciate, along with the power to discriminate, and to crown these gifts, if possible, by the yet higher gift of interpretation... The aim of all institutions of higher education should be to achieve self-education under guidance, for the only real education is self-education. It is the constant endeavor of Southwestern to inspire undergraduates with a respect for intellectual pursuits and admiration for intellectual attainment. [6]

A Britisher, Sir Maurice Bowra, Warden of Wadham College, Oxford, distinguishes the liberal arts college from both the research institute and the institute of technology when he observes that the liberal arts college aims "...neither at research for its own sake nor at providing an immediately useful, technical 'know-how'... (but at producing) a fully educated man, fit to take an active part in a civilized society and at the same time to be a reasonably complete human

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3 See Dr. Clark Kerr's article "The Frantic Race to Remain Contemporary", in The Contemporary University: USA, op cit., p. 38.

4 See Dr. Hutchins' essay, "The Time is Now" in Reflections on the Role of Liberal Education, op cit., p. 261.

5 Ibid., p. 261

6 See Cooper, W. Raymond, Southwestern at Memphis: 1848-1948 (Richmond: John Knox Press, 1949), p. 165.

being in his own right."[7] The aims of such a college, according to Sir Maurice, are to give each student the education which will best train his mind "to understand fresh subjects and to turn all its resources into examining and assessing them"; to know how to use words with correctness and precision; to distinguish between truth and falsehood, between sense and nonsense; to think on matters worth thinking about; and to take pleasure in doing so. Only so, contends Sir Maurice, will a society based on the rights and responsibilities of unique individuals realize the full potentialities inherent in democracy.

Even technology must rely upon such educational aims, Sir Maurice reminds us, for a technologist who is nothing else is not likely to be a very good technologist:

> If a man is trained with a high degree of technical proficiency and nothing else, he will lack two important qualifications. First, even within his own sphere, where he is fully and confidently at home, he will not have the trained vision to see what it can gain by expanding in new directions and exploiting unexploited needs. Secondly, because he is no more than a technician, it is likely that, as he grows older, his knowledge will age even faster than he does and that, when he ought to be inventing new methods, he will be incapable of doing so.[8]

One trouble with a purely technical education is that ultimately it defeats its own ends. It seeks quick returns, and for a time it may get them, but increasingly it will find itself impoverished because it has taken too short a view. The appalling difficulties of our modern technological world must be faced by men with minds sufficiently flexible and perceptive to see what some of the main problems are and to suggest ways of solving them. Today's world–says Maurice Bowra–must have men with active, methodical intelligence grounded in the discipline of thinking and able to think also about unfamiliar matters.

The liberal arts college which aspires to provide such leadership for today's world has no less concern for thoroughness in preparation for specialization in the various fields of human endeavor and productivity. As Professors Robert H. Knapp and H. B. Goodrich of Wesleyan University have shown in a careful research project, "small liberal-arts colleges are far and away the most productive sources of future scientists."[9] But still the greatest contribution to American life of such colleges is to the "elite of an intellectual character rather than an economic kind." Along with the advantage of providing to its students "a natural and full process of maturing in personality, intellect and wisdom", the best type of college of liberal arts and sciences accepts the challenge issued by Dr. De Vane in the following quotation:

> If the universities and colleges will put their minds to this task, as I am sure the best of them will do, the chances of creating an exciting and life-giving intellectual climate for the undergraduate in our colleges in the next twenty-five years seems to me excellent. What is needed is a model, or several of them, and if these are provided by the strong university colleges and the best independent colleges the whole establishment of higher education in America will benefit.[10]

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7 See Sir Maurice Bowra's essay, "The Idea of a Liberal Arts College", in Reflections on the Role of Liberal Education, op cit., p. 187.

8 Ibid., p. 190

9 As cited by Dr. D. Elton Trueblood in his article "Why I Chose a Small College", printed in the September, 1956, issue of The Reader's Digest (Pleasantville, N.Y.: The Reader's Digest Association, Inc., 1956). In this article, Dr. Trueblood points out that of the first 50 institutions in America, judged by the scientific eminence of their graduates, 39 are small, privately-supported colleges. Furthermore, he cites a recent study of 33,500 business executives which showed that 88 per cent are college graduates, and of that number 71 per cent came from generally small liberal arts colleges.

10 See Dr. De Vane's article, op cit., p. 18.

Such a liberal arts college seeks to serve higher education, technology, the nation, and the world, by taking the long look, and by equipping individuals to raise the questions and continually seek answers in matters of importance to themselves and to the whole human race.

TRAINING MANAGEMENT PERSONNEL

The discussion on the training of management personnel was led by Dr. James Hodgetts, Director of Management Development, Memphis State University.

Management training may be divided into two distinct types. Training may be personalized or individually planned as one type or a group may be trained in a class or in a conference setting. The form and extent of training may be planned in many different ways: (1) internal management development. A company or business firm plan a management development program fitted to meet the institutions demands for supervisory or managerial requirements on an in-service training basis or on a preservice training plan. The policies and program content are planned by company personnel. One problem facing this form of training is the possibility that the "home" office dominates the program and may not permit nor allow for modifications or deviations essential to the particular needs of the branch operation or of the several divisions of the firm. (2) College and University. Several colleges and universities include management development as a part of the curriculum or as special departments or divisions of the university. A typical program is available at Memphis State University where special classes are held on a regular semester basis for potential managers and managers for local firms. These classes are open to individual enrollees or to groups of employees from one firm with progressive courses to meet the general demand for managerial training. Special short courses of concentrated training are also offered as a service to specialized groups. (3) Consultants and consulting firms. Several persons, as individuals or as members of consulting firms, perform services similar to the college services but on a more highly customized basis to fit the particular needs of a company. Frequently this service would include a study of the firm to determine the objectives for the training program. (4) Civic and professional groups. Management training provided by civic and professional groups would typically be less specialized than the above mentioned forms. General management improvement is provided through conferences, workshops, or similar meetings of limited duration or through a continuous program of self-improvement as a part of a membership in a professional organization.

Management training is available and desirable from the level of the "front line" supervisor to the top management personnel. Normally persons from the several levels of responsibility are not placed in the same classes. The higher echelon persons in a class tend to inhibit the lesser responsible employee thus preventing a free exchange of conversation or discussion. It is deemed important, however, for all management personnel to be involved in a training program from top to bottom. Frequently the middle-management people have been frustrated by the upper level person in attempting implementation of ideas the "boss" cannot understand or trust. The training effort is thereby wasted. Examples of this problem were cited by seminar participants. One company had sent a group of trainees to the University of Chicago for three weeks with all expenses paid. The "top management" group thwarted all efforts for change.

The greatest need seen by the group for management programs is the front line supervisor. It may be a paradox that students of management at the colleges are trained for a role more typically at the level of a vice-president or company officer and lack the training or experience essential for success in minor managerial positions or as front line supervisors. Dr. Hodgetts states: "I tell college

graduates to go with a company that will train them how to manage because you don't learn this in college."

Personnel managers for companies that offer immediate training for employees that are recent graduates discover that too frequently the graduate wants job experience immediately in an effort to "climb the ladder of success" rather than to re-enter school conditions.

Additional problems facing employers is that of getting to the graduate for an interview. The less glamorous company finds no graduate that will consider his company as an opportunity. Graduates are interviewing the company rather than company personnel officers interviewing the candidate. Other four-year graduates are returning to school for graduate programs or are entering the military ranks upon graduation.

A solution proffered was the employment of students during the summer and the encouragement of co-op students on a work-study arrangement but one company official of a large manufacturing concern stated his company had ceased this program as being too costly. The company found that upon graduation the individual sought employment elsewhere.

PLANNING FOR THE VOCATIONAL-TECHNICAL SCHOOLS

The discussion leaders for this group included W. A. McGinnis of the Memphis City Schools and Milton Phillips of Memphis State University.

Memphis City Schools have announced plans for the expansion of vocational programs during 1967. An area vocational school is to be constructed on the old Merril School property in the central western area of the city. Other plans for the year include the addition of vocational subjects at North Memphis High School; at South Side High School, to include health occupations; and, at Technical High School, including practical nursing. Training for day-care center nurseries has been introduced to the course of studies in conjunction with the home economics department of the schools to provide the opportunity for experience on a daily basis. A two-year program in tailoring will be introduced with training in dry cleaning methods to be a part of the program.

Cooperative programs providing work experience and classroom activities in distributive occupations now enroll about 400 pupils. Planned for the immediate future is an industrial cooperative program following the pattern of a half day in the classroom and a half day in an industry. The school personnel are seeking cooperative industries for this program. It is the opinion of educators that public involvement in occupational programs, to include planning and work opportunities, that will provide success to the endeavor by raising the status of the program in the eyes of parents and pupils which will attract more pupils to the program. The cooperative programs help the pupil attain his wants. Many of the "kids" want money so they can have a car and a girl friend. Most pupils need a job before he can get either the money, the car, or the girl friend. Cooperative programs tend to insure job opportunities.

The major question placed before the seminar expressed a concern on the part of the community for the quality of instruction and learning in the basic subject matter of the curriculum such as mathematics, English, etc. The education of the Negro youth was particularly expressed in this context. The topic was expanded to include training in mechanical skills essential for employment in a shop or for training in a trade. Knowledge and skill in the communication arts was also stressed.

The responses to the questions posed suggested continued effort to desegregate faculties to improve the quality of teaching by the employment of better teachers selected and placed in the schools where needed on the basis of teacher qualification rather than by color or political expediency.

Other questions of a similar nature were raised but clear-cut questions and answers were difficult to discern.

STATE OF TENNESSEE

DEPARTMENT OF EDUCATION

DIVISION OF VOCATIONAL EDUCATION
115 CORDELL HULL BUILDING
NASHVILLE 37219

May 4, 1966

Mr. William S. Pollard, Jr. Chairman
Chamber of Commerce Education Committee
Chamber of Commerce
Peabody Hotel
Memphis, Tennessee

Dear Mr. Pollard:

At the suggestion of Mr. George H. Barnes, Superintendent of Shelby County Schools, this letter is directed to you with reference to the regional technical institute to be constructed in Shelby County.

Recent legislative action in Tennessee provided for the construction and operation of area vocational schools and regional technical institutes. Three of the latter are planned or under construction. Chattanooga State Technical Institute is in operation in temporary quarters and its new plant is under construction, and the second one of these is to be constructed in the Memphis area.

The area vocational schools will offer primarily trade and moderate level technical programs, largely at the secondary level. The technical institute on the other hand will offer two year post-high school, college level, programs, designed to train engineering aids or technicians, and will grant associate degrees in engineering or science to its graduates.

As a further clarification of the nature of the technical institute program, its graduates will have approximately the same number of hours in their respective technologies they would have if they pursued the four year engineering degree program, but the training here is concerned primarily with applications of engineering principals rather than research and development.

Admittedly, our initial offerings in the institute may not be as broad as we would like, due to dollar limitations, and our immediate problem is to determine what technologies we should include initially and space requirements for them, to be turned over to the architect for preliminary planning.

Our information indicates serious consideration for the following:

Electrical Technology--Power generation and distribution
Electronics Technology
Automation--as one of the options in electronics
Chemical Technology
Mechanical Technology--Production and Management
Mechanical Technology--Machine and Tool Design
Civil Technology--Structures
Electronic Data Processing--Business
Electronic Data Processing--Scientific

May 4, 1966

2--Mr. William S. Pollard, Jr. Chairman
Chamber of Commerce Education Committee

We would like your evaluation of the above and suggestions as to others, if any, which you feel should be considered now or as future inclusions.

As we wish to give preliminary information to the architect at the earliest possible date, your committee's reaction to the above, and any other suggestions you may have, would be appreciated.

Anticipating an early reply, and thanking you for your assistance and that of your committe, I am,

Very truly yours,

G. E. Freeman
Director, Technical Education
Program

GEF:mm

I am sending you, under separate cover, a catalogue on the Chattanooga State Technical Institute.

THE ROLE OF CULTURAL DEVELOPMENT TO SECURE THE INDUSTRIAL CLIMATE

The discussion leader for this seminar was Alfred Alperin of A. T. Distributors.

The discussion in this session of the conference faced the problem of how to provide the industry of the Memphis area with adequate personnel. The role of cultural development commands a high place in the schema of attracting industries to the area in the first place. The usual series of questions from companies desiring to consider Memphis includes questions on the cultural development of the city. This is especially important to the firm that has a large complement of management or scientific personnel. The Atomic Energy Commission National Accelerator Laboratory inquiry included this question, and a request for further information required an expansion of Memphis' report on these facilities. Frequently, the desire of the firm to move is for reasons other than cultural advantages but the new location must include these same advantages to induce "white collar" workers to relocate with the company.

Cultural activities are good for the employment of the man's mind, and the enlargement of his understanding of the world around him. These activities provide for the fulfillment of his desire for beauty and expression, the utilization of one's time for mental developement and the understanding of the past to more ably predict the future.

All human beings deserve the right for exposure to the arts–all arts–whether it be in the form of visual sculpture, painting, pottery, or in the performing arts of ballet, theatre, music to include the symphonic, jazz, classical, modern, opera, poetry or the contemporary. The arts have been referred to as the "silk stocking set's play thing" in America because this is a new country fighting for survival with many diversified interests with little heritage upon which to build a society of its own. Only a comparatively few dedicated individuals exposed to the arts have kept the cultural arts moving forward. The opportunity is with us now with more affluent families who have attained more security to create a climate in which the arts may flourish so that cultural activities may expand to include persons in the upper economic classification of families. Art has no enemy other than ignorance.

All persons must feel at ease to partake of the cultural environment for the cultural community to thrive. To be a part of it, and to understand that each individual's support and participation is needed, is an immense benefit to each and to the community as a whole.

The need for community action is to expand cultural programs in the schools particularly tailored to the live and vibrant artistic endeavors of the city. Teach music, not just band music. Teach the theatrical and read drama, particularly the drama that the student may have the opportunity to witness on a professional stage by professional actors. Conduct tours of interest to the Art Gallery. Institute upper-grade art courses, ballet and opera. This will permeate all segments of the community. Involve the family, encourage family discounts for participation in the ballet, the theatre, the opera, and the symphony. Permit the performance of live productions in the schools with a follow-up of student-performer seminars.

Further encouragement must be made to the "blue collar" worker for exposure to all art forms. This encouragement may be in the form of providing four tickets for the price of two to permit the entire family to participate. Encourage labor unions to purchase blocks of tickets for the development of a better image; for peer acceptance. Encourage leaders among the working force to serve on cultural boards.

Through the efforts of local government groups, the Chamber of Commerce, our educational leaders and other leadership of the community, it is possible to encourage, through emphasis or advertisement, that our cultural climate is a vibrant part of Memphis, it is alive, interesting, educational, exciting; and, not confined to the "silk stocking set." After all, art, music, the theatre, opera, and ballet have all survived the ages, all wars, and destructive forces of civilization–there must be something worthwhile in it.

A RECAPITULATION

E. C. Stimbert, Superintendent
Memphis City Schools
Educational Assessment–Memphis
November 17, 1966

This is an impossible task. It is difficult for each of you to pull together that segment of this seminar that you were engaged in. Recognizing the utter impossibility of recapping all segments I think we should turn to how this seminar has been structured. You don't have to worry too much about my recapping because the reports, as has been indicated, will be printed. Dr. Colmey's, Dr. Newkirk's and Dr. Humphreys' will be in the final report. We have accumulated and tried to pull together some notes from the reporters and you may have wondered about some of our other techniques. This is a little bit like supervising in an elementary school or high school. A principal can walk down the hall and tell a little bit about what is going on. What kind of a school is this? There is a kind of atmosphere about a classroom and everyone of you in here who is a teacher knows what I'm talking about. So this morning I went around just trying to get the feel of your group meetings. You were in groups of eight, nine, or ten. I wanted to get some feeling of the working arrangements and the topics and maybe a little bit about the personalities. I'm sure that you realize that if you are graphing responses of groups like these and I happen to come in–as a supervisor might do with a teacher when there is a misspelled word on the board–you would think you were in a horrible state of affairs because the supervisor saw you when he wasn't supposed to see you. So I'm granting the fact that I may not have been in any of these groups at the peak period of your discussion or at the moment when the most significant discussion was going on. I'm not concerned about that because that will be picked up in the reports of the reporters. I do think its important for me to attempt, not this impossible task, but as another person along with you engaged in this seminar to try to do a little assessing, a little bit of an inventorying–where we were and where we are, and maybe where we need to go. I would like to say, as I did when we held our first meeting in this room, that probably what we're doing is the most significant activity carried on in the city of Memphis by educators and business people. If some of this can get off the ground, even a little bit of it in terms of action programs, this city will really "go to town" because there aren't too many cities doing it. It's kind of a unique arrangement. I think we ought to express our thanks, not to the various other groups that worked, but to the Chamber of Commerce for putting education No. 2 in their full page ad when they printed their ten-point program. Having accomplished the number one, am I naive to assume that education will now move up to No. 1 in the activities and the thought processes of the Chamber of Commerce? (Pollard said yes). Yes, I think it will because if we look at the history of this meeting, there was a small committee–the Education Improvement Committee. It was after some money through the Southern Association of Colleges and Schools. Memphis State was represented and we were trying to get a project approved that would cost a couple of million dollars. This was an Education Improvement Committee and this indicated that in the city of Memphis there was and is no fragmentation or friction of the kind you have in some other cities. But here was public education, parochial education, private education, higher education, all thinking together in terms of how do these facets of education serve the Memphis community, and how can we do a better job of doing it. Now frankly, the Chamber was not doing too much at that point, but we wanted to put out a brochure so we came to the Chamber and said, "How about some help?" And that's how this whole assessment project got started. Really it was the vision of some people in the Chamber of Commerce who saw that education is irrevocably woven into the successful, ongoing future program of any city. And so the Area Chamber of Commerce Education Committee took a most significant step. Charles Mott, of Southern Bell, was the first chairman, and was ably succeeded by Mr. Pollard. I could probably stop right here because I think this is something that just couldn't happen unless some business

people had enough vision to see that in this kind of an arrangement between educators and the business community we can find the solutions to these problems that we've been enunciating during this Seminar.

Now, just a few other things. This conference ought to be a sort of status report on the cooperation and understanding that has been developing. The trend has been in this direction and let's not have anything happen as an outgrowth of this conference that would do anything but continue the upward movement. In that vein I shall have a few comments to make because this is an observation that maybe you have made and I need to enunciate it so that it gets into the record. I think we have to have more than just a committee of the Chamber of Commerce called the Education Committee. That isn't enough. I'd hate to count all the words that we've said today, and if we're just going to print them and send them around to a lot of people, forget it. It isn't worth the paper, but if out of all of this discussion and these papers, this committee of the Chamber of Commerce and the educational community can establish some real action programs, then that's what we're after. It is in that vein of understanding how action takes place that we need to spend a lot more time. I sense some little ebbs and flows of discussion that might indicate that there still is a high level of necessity for communication between these two communities. For example, there are gaps in the thinking of business people who were in this seminar. Gaps–why? Because we didn't have a parallel research project here during this seminar. We have researched the business man and what he thinks about education. Maybe the next time we come together we need a research project on what the school people think about the business man and what he needs to do to bring something to this arrangement. I think we've had more discussion during these sessions on what toning-up, changes, or modifications education needs to adjust and adapt than we have of how the business man might immediately utilize some services that are available that he doesn't know about because we haven't dialogued the programs sufficiently. Now the assessment is going to help and I picked this up from the committee comments that maybe we're not quite ready for the action program. We ought to remember this. We ought to be very alert to the fact that this is just based on assessment so far. If you look at the topic, it is *Educational Assessment–Memphis*. As a result of assessment, we will be thrust into these action programs that are going to come later, so maybe we shouldn't be in too big a hurry. I'm thinking of how U.T. did it with the Board of Education. I'll just illustrate what I'm talking about. It would have been so easy to get off the track but U. T. needed some para-medical courses. We could get the money through vocational education; they couldn't. They had the teachers and the know-how, so by getting together to plan, the para-medical courses came into being. I don't know whether they have been mentioned here or not. This act of getting the medical fraternity and the educational fraternity together to share in this planning made possible these very necessary courses. It's important to get together. You don't plan for the good of the city by stand-offishness. You have to mix it up so that you each understand each other's point of view, so that an outsider could not tell the difference whether an educator is talking or whether a business man is talking. I think we can arrive at that point in Memphis. I have never seen such an interest in all of a large city's educational establishments as is evidenced here in a positive way. In some other places there are pushes and thrusts in maybe one or two directions, but here there is a unanimity that is difficult to detect in other cities.

Then I want to make a comment about problems and solutions as I look at some of these reports. This was the format of our meeting, problems this morning and solutions this afternoon. Well, of course, these solutions are still hot as a pancake off the griddle and I don't know about all of them, but I do know a little bit about some dangers and of these I would speak. I think we've got to be careful that we keep a balance. Our recommendations should come from a lot of data-gathering. Otherwise, I think we're going to be rushing into some crash programs. We've based this meeting on a couple of papers that are well-documented. Let's keep doing this so that as we make our plans we just don't develop an idea because somebody wants to do something. It's so easy to do that. You get concerned about a situation and then maybe somebody in a certain leadership role has a lot of power factor about him–the atmosphere is there. When he speaks the

people have a tendency to listen. And the first thing you know, you're doing the thing which you don't really have a reason for doing. Let me illustrate and don't be too sensitive. It disturbs me no end that business men can't get together on what kind of economics should be taught in the public schools. We've got three programs going now and they're not the same. Now a fourth one comes along because someone moves into the city from another place where they had a good one. I suppose if somebody moves in from Des Moines or Detroit tomorrow and another one from Denver, we'll have three more programs going. Wouldn't it be far better if the group involved in this kind of course development would get together and find out what is happening first, whether it's on the Memphis State campus or whether it's in the public schools or whether it's offered in a parochial setting—no matter where it is, this assessment is an important technique if we are to keep our balance and keep our heads about us. I think one solution is information as this group has been toying with it. The whole problem of communication between these two communities within Memphis—the business community and the education community should be explored.

I think we ought to do it on the basis of more complete data than just rushing in and saying, "Well, I'm from Portland, Oregon, and this is what they did in vocational education out there. This is the kind of a building they built and these are the kinds of courses. Now if Memphis would just do it the same way." Well, that's not quite the way we ought to do it. I think, too, there's a human factor in all of this that we should be cognizant of. Guidance counselors are just as sensitive as some other people when you couch your data in terminology that is just a blast. You should be mighty, mighty careful that you don't forget history. Ten years ago there were no guidance counselors in Memphis. I've heard this discussed in a lot of groups and we've placed a lot of responsibility on guidance counselors. Take a look at them and get to know them. As some business men have been suggesting maybe what we need to do is to rush over there and say, "How can I help you?" instead of saying, "You're telling everybody to go to college." The one statement is an offer of assistance, the other is less than a veiled criticism. I think that if we forget this human factor of jealousies for credit, animosity toward a reporter, and all the little things that can creep in because human beings still live in Memphis, then we've lost something. I would strongly suggest that we have a conference with guidance counselors. Let's do the same thing with them we're doing here and let's talk to obtain ideas and points of view. Let's do some researching and let's be sure that we don't indict until we've got the other piece of research to fit right into the picture. This is not a big issue. I am inserting it for whatever it might be worth because you know and I know that some great ideas have died aborning because of some little personal frictions that developed along the line. The plan of action was supposed to proceed and didn't because somebody made the wrong interpretation of a particular point of view.

And then I'd like to raise the question of when is an opinion a fact. I think that we educators have got a real responsibility here as I sense again all of the reports of this meeting that we are going to be reading and studying. To me, an opinion is always a fact. Now most of you have said all your lives it isn't and that there is a big difference between fact and opinion. But as we deal with this problem and somebody has an opinion about what the public school is doing, (that they don't train secretaries well enough), let's not overlook the fact that in his mind that's a fact and with us it's a fact with which we'll have to deal. You say, "Well, it's still an opinion." Well, maybe it is, but if I say, "Well, this is your opinion and mine is not the same," then we just clash. I don't think we're going to solve the problem of how you train secretaries, or whether you're going to teach spelling better by simply clashing. My point of view keeps out of it this rash, quick reaction of a little bit of anger toward a criticism. I guess it's one reason why I'm not too bothered when the school system gets criticized. In the critic's mind something has happened to cause that mind to operate in that fashion and have that idea. Now turn it around, maybe there are a lot of teachers in all of our systems that have some feelings about business, and maybe this is one reason they don't know a lot about what profits business makes and how much they should make and all of the rest of the things that periodically are thrown into tests for teachers and high school kids to take. I think we should approach

an assessment and plan of action with the idea that we're going to have a lot of feelings and that they aren't always going to be facts. We do accumulate data, but you can't get out of data the emotional reactions of people, particularly to a city and what direction it's going to take in its growth. We haven't mentioned money in all of this today. As least I haven't picked it up at any point but I think it's been in the background of the thinking of a lot of people. It has to do with airports and streets and garbage collection, it has to do with a lot of things. What kind of a city is this going to be when there are a million and a half people here? It means that the public school system has got to be tripled in its classroom space and in its personnel requirements. Consequently, you get into this whole business of how do we feel and think about this kind of progress. What are we going to do about education in this setting of expansion and growth?

I think it's important that we get some kind of sub-programs going. I'm sold on what we've done today and I've tried to say it by complimenting the Chamber of Commerce highly, giving them full, pure, unqualified, unadulterated credit because they picked up a loose ball so to speak. They've been and are running in the right direction with it. If you developed solutions this afternoon you came up with them too fast–they are not available in that much of a hurry. No doubt you talked about possible solutions. One positive idea might involve keeping this kind of a seminar going periodically. One meeting might involve guidance counselors. I think here is a big effort that we can make. It's a sensitive area but I've heard some ideas that disturb me. I don't know if I'm justified in being disturbed. I heard some things that on first blush made me think that we were un-American . . .

i.e. A child, in the Head Start Program, preschool begins to move all the way through school. When do you with your God-like vision point to him and say, "This is all, bud, you've had it. You've got to take this road or that. I don't care what your parents think." I don't care what 51% of the parents of Memphis children think. (51% of our enrollment is Negro.) And you talk in terms of history and tradition? You've got a lot of work to do on 51% of your population in Memphis when you begin to talk about blue collar jobs because they've had them all through the years. I'm very pointed about this because I think this is one of our crucial issues. The educational system must face it. It may do some real traumatic things to grading,promotions and diplomas. If that doesn't tie in with the business community and the industrial community, then I don't know what does. You need that meeting of the minds of business men and educators–supervisors, guidance counselors, and classroom teachers.

There's something else that ought to be ongoing.

We are emphasizing and should continue to place much emphasis on vocational and technical programs. Again our community is vulnerable. We're doing lots of good things and we have some things in the mill but we are going to need a lot of help, some of it from outside the city of Memphis. As already indicated it may be at the state level, some of it may be at the federal level. I've testified twice before congressional committees on a construction bill. Why? Because you've got to have square footage of floor space to put some of the kinds of programs you're talking about. This means bond issues. Now if the state builds a vocational and technical school at the Penal Farm, of course that doesn't cost us anything? I doubt it! I don't think there is such a thing as free education. I think we are all involved in this business of how we are going to promote, underwrite, undergird, support (any words you want to use) an intensive drive to accelerate planning and accomplishments in the vocational and technical fields. All of the statistics that you read about in this area are all insufficient. If we were doing twice as much right now, it would still be half as much as we ought to be doing. So, here's something ongoing that is a challenge. A recap isn't supposed to be a challenge; but this one is.

Another positive suggestion would be to have a seminar at some time on how to communicate. We might well have experts like Lippet, or others, who are dynamic in this field of communication. And all of us who are going to be involved, in the Chamber of Commerce and in education, in these ongoing programs, might well take time to take a deep breath and have a good shorty course on communication. I'll tell you one thing for sure that I've found out–you've got to have the phone bill paid at both ends. I don't know how many times I've

sent messages but the other fellow didn't pick up the phone. Or if I was transmitting on a certain wave length he didn't tune in. And there is a dual responsibility here of sending and receiving in communication and there are arts, techniques, and skills about it. Let's see what we can do about having a seminar on communication as a step toward better understanding between business and education.

(Loud truck passing). I can exhaust our possibilities better than that, I think!

There is one report that I didn't see until just a few minutes before I came in here.

I don't think in this seminar, because of the shortness of the time, as I look back, we emphasized enough other kinds of education than the college-bound idea and the vocational. I think we really went to town on those two and for some reason or another we thought there was a conflict between them. In one group they resolved it very well. Why should there be a conflict? And maybe there shouldn't be. The fellow who is going to work on automatic transmissions has probably got the brain power to take him through college. And that's a thought. Of course, we've never exhausted the brain power of this nation. Read George Gallup's book, "The Miracle Ahead," and you'll see what I'm talking about. I'm not so scared of all these kids going to college. In the past we didn't give everybody an eighth grade diploma. In the more recent past we don't give everyone a high school diploma. Some are saying, "Well, you just watered it all down." No, we didn't. That high school graduate today knows a whole lot more than you did when you graduated. Don't let anybody sell education short. I have a feeling that we didn't really come face to face with this aspect of education in this seminar. We were so concerned about business and industry here we forgot the cultural, the esthetic, the spiritual, the philosophical. Businesses send some of their top executives to a six-weeks course in a certain place in New York—to learn more about business? No, to study the great books, and to learn a little bit about the liberal arts—it has nothing to do with business? It doesn't? It's got a lot to do with the kind of community in which business and industry is going to function. So I think we might well pursue this a little bit. I think we didn't have time this time. It could be a topic for another seminar.

And then just a thought or two to cover crash programs and quickie approaches —I think we are tempted to do that in connection with dropouts. This has an effect on the labor market. This youngster is not able to perform a job and he becomes a drag on society. There is a struggle between white collar jobs and the blue collar jobs at the present time. Dr. Humphreys was talking about it at noon today, lifting man to a very key position. The person makes the difference. This community and every other community is made up of people.

And then, in closing, the effect of fragmentation. This seminar and the meeting we held before it and the establishment of the Chamber's position on education—this combination is unbeatable. And let's sort of pledge ourselves on this particular day as we recap all of this to keep doing this. It doesn't always mean we are going to meet here in the Flag Room. There are all kinds of techniques to keep us from being in bits and pieces in our drive to get things done. If something involves education then let us involve educators. If we are going to have a good medical community I think that medical responsibilities ought to be placed in the hands of people who are knowledgeable about medical things. I think this is true in the management field, I think it's true in education.

There should be an insistence in this community that we properly channel our business and industrial disciplines and educational disciplines and that areas of interest are not split pieces. We all should see a common objective. It seems to me that we ought to make this committee of the Chamber of Commerce the means for this kind of a joint thrust and make this committee a potent factor in this city's future. I think that we've had it told to us that mass education is a massive problem and if you are going to educate people for whatever purpose then it's going to take a lot of people responsible for it. This "kind of business" that we have engaged in today—and I use that word in quotes—"This kind of a business"—probably comes as near to finding the solution of our problems as anything I can think of.

I leave the recap with you for whatever it is worth.

A FINAL WORD

William Pollard

Thank you very much, Mr. Stimbert, for your recapitulation and overview of our seminar efforts here today. Many of the points made were very necessary of being made.

In final summary on the part of the Chamber committee, we would make two or three closing observations. We hope that nothing has suggested to any of you who have participated so diligently today in this activity that we think of this endeavor as a terminal action. In fact, it is much nearer the alpha than the omega. We hope that it will stimulate the kind of thinking that has been indicated by Mr. Stimbert in terms of forward progress. We point out to you the fact that this committee of the Chamber is unique in that it is made up essentially of the educational leadership of the community and not of the business leadership. Perhaps, in this regard, it is to be faulted; and, perhaps, it is ready for slight enlargement. This is something that we shall want to consider as we move along with our program of work.

We reassure all of you that the Chamber does not see this as a concluding seminar that has provided any "solutions" because, usually, opening doors or boxes lead to more doors and boxes; but, interestingly enough, we do seem to make forward motion. The Chamber is, by its nature and its history, a conservative element and group. It will, if anything, provide brakes and checks through its inherent nature, rather than going in the other direction.

It has been a pleasure to work with you. We thank all of you for your endeavors.

This meeting stands adjourned.

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Ralph U. Thomas, Secretary of Education Committee

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